THE IDENTIFICATION OF PATIENT BELIEFS RELATIVE TO DRUG EDUCATION NEEDS ON A REHABILITATION UNIT

by

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FINAL READING APPROVAL

TO THE DOCTOR OF PHARMACY COMMITTEE OF THE UNIVERSITY OF UTAH COLLEGE OF PHARMACY:

I have read the clinical research project report of Patricia Lynn Orlando in its final form and have found that 1) its format, citations, and bibliographic style are consistent and acceptable; 2) its illustrative materials including figures, tables, and charts are in place; and 3) the final manuscript is satisfactory to the Supervisory Committee and is ready for submission to the Doctor of Pharmacy Committee.

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UNIVERSITY OF UTAH COLLEGE OF PHARMACY

SUPERVISORY COMMITTEE APPROVAL

of a clinical research project report submitted by

Patricia Lynn Orlando

We, the undersigned, have read this clinical research project report and have found it to be of satisfactory quality for a Doctor of Pharmacy Degree.

5/29/85
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INTRODUCTION

An interpretation of medication education *per se* begins with the realization that education is not an autonomous self-regulating system but rather is a human creation complete with its own human motives, human goals, and human achievements. The education system is created, rejuvenated, and maintained by human beings. The laws and organization which comprise education have not only been dependent upon new human discoveries being made, but also have relied upon that character of human nature doing the discovering.

Ideally, experienced health care professionals who wish to personally evaluate a new patient education method will spontaneously approach the patient who will be experiencing the ultimate effects of this new education design. However, before new patient education learning methods can be designed and implemented, one must seriously evaluate the goals and objectives of this educational technique.

Health care professionals (physicians and pharmacists) are motivated like all members of the human species by various basic needs for food, safety, protection and care; by needs for affection and love; by needs for respect, standing, and status with resulting self-respect; and by a need for self-realization or self-fulfillment. Less studied but ever present through simple observation are the cognitive needs for knowledge and understanding.

Patients, like health care professionals, are also motivated by these basic needs. Patients desire to be fed, safe, protected and

cared for; to be loved, respected and to feel a sense of self-fulfillment. They also express a curious need for knowledge and understanding of concepts and ideas unfamiliar to them.

These needs of human nature are similar in some respects and different in others. All human beings living in the natural world make concessions to survive. However, human intrinsic needs differ from the laws of natural reality. Wishes, fears, dreams and hopes differ from temperatures, atoms, light energy, and sand pebbles. Besides differing from the laws of nature, the needs of human beings do not necessarily share the same plane of satisfaction. One such need involves that of knowledge and understanding.[1]

Health care professionals seek as much satisfaction of needs within their medical work as within their private and social lives. Their persistent curiosity and desire to understand, explain, and systematize are responsible for numerous scientific advances which are enjoyed by the medical community. The satisfaction of professional needs involves the ultimate goal of not only the treatment and potential cure of medical problems but also the nurturing of the patient's understanding about his medical conditions in general and medication education in particular.

The medical literature has provided substantiation that health care professionals agree on general guidelines for patient medication education.[2-12] Having a well established and progressive knowledge base, these professionals have projected their own perspectives about medication education with little appreciation for the educational needs felt by the patient. These professional perspectives have served to subordinate the patient who has no medical knowledge and relies on

expert opinion to alleviate sickness. However, the patient does have beliefs about health care in general and about medication use in particular. Although the projected educational perspectives have been a reflection of professional need satisfaction, health care professionals have failed to satisfy patient needs through their neglect to acknowledge patient beliefs which form a framework for medication education needs.

Maslow's Hierarchy of Needs

To understand patient beliefs, needs, and values, one must first understand the perceptions and motivations which make people act as they do. One person who has analyzed human motivation is Abraham Maslow, an eminent humanistic psychologist. Abraham Maslow, born in 1908, was the son of uneducated Russian Jewish immigrants. He regarded man's inborn nature as basically good but saw the innate tendency toward growth and self-actualization as rather weak and fragile. Maslow suggested that the best way to conceptualize human motivations was to visualize it as a hierarchy of need. This involved a pyramid of human needs from the lowest, most concrete of needs to the highest, more abstract of needs.[13]

At the base of the pyramid are the physiological needs which include hunger, thirst, sex and other desires which promote species survival. The physiological needs are the most prepotent of all basic needs. This means that if a human being is deprived of all basic needs and the pleasures of life, he* will probably hunger more for food, for

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* The present use of personal pronouns has caused much perplexity and confusion. This writer finds the frequent use of "he/she" cumbersome and unattractive and has decided to maintain "he" throughout the introduction and methods sections. This should not be construed to eliminate the members of the female gender.

example, than safety, love or self-esteem. If the person is dominated by these physiological needs all other needs become unimportant and nonexistent. All bodily systems become hunger-satisfying mechanisms. He dreams of food, perceives of food, talks of food, and wants only food. Any capacity which cannot satisfy this need lies dormant. Life is defined in terms of the abundance of foodstores. This person is said to live by bread alone since all other desires (freedom, love, etc.) fail to fill the stomach. Urges to read, longings for a new fur coat or thoughts of lying on a warm beach become of secondary importance. No other interests exist for this hungry person.[14]

True, man does live by bread alone--when no bread exists. What becomes of other needs when man's stomach is contentedly filled? Instead of physiological hungers dominating the organism, other higher needs emerge. When these needs are satisfied, still higher needs emerge. If at any time a previously satisfied need becomes unsatisfied, it again will dominate since the organism's behavior is organized only by unsatisfied needs. If physiological needs are satisfied, they become unimportant to the overall individual's dynamics. The hierarchy of needs is therefore described by this relative prepotency of organization.

When the physiologicl needs are satisfied, a new set of needs on the pyramid emerges: the safety needs (including security, stability, dependency, order, protection, and health). The need-emergence patterns stated for the physiological needs holds for these desires. The person characterized by this state lives for safety alone. When these needs are satisfied, the healthy and fortunate person feels safe from wild

animals, extremes of temperature, diseases, and chaos. In a real sense, these safety needs no longer play an active motivating function.

When the physiological and safety needs are satisfied, the needs of love and belongingness emerge to repeat this cycle on a higher level of gratification. The person who hungers for affection and a place in his family or among friends strives vigorously to achieve this end.[15]

As the self-esteem needs become gratified, one has feelings of self-confidence, worth, usefulness, and strength. The self-esteem needs are classified into two subsidiary sets. The first set involves desires for independence and freedom, strength, achievement, mastery and confidence in the face of the world. The second set incorporates the desires for reputation, respect for oneself and others, recognition, dignity, and capability. The person who is fed, safe, and cared for and yet has feelings of inferiority, weakness, and helplessness still struggles for recognition and self-confidence as he utilizes all capacities in his attempts to satisfy his self-esteem needs.[16]

Even when all the physiological, safety, love and esteem needs are satisfied, the human being still develops a new discontent or restlessness. He questions his place in society and wonders if he truly is doing what he is fitted for as an individual. Being true to his nature, what a person can be, he must be. This new level called self-actualization refers to man's desire for self-fulfillment to become everything that he is capable of becoming.[17]

This hierarchy of need is presented as if it were a fixed order, but this is not necessarily true. One of the most common order reversals involves people who find self-esteem more important than love. While lacking love, these people play an aggressive and confident role

seeking self-assertion for the sake of love rather than for self-assertion. Another common reversal of the hierarchy involves the underestimation of a long satisfied need. If a person gives up his job to preserve his integrity and starves afterwards, he may decide to return to his work, even though a loss of self-respect may result, in order to feed himself.[18]

So far, this discussion of the hierarchy of need gives the pretense that as one becomes satisfied another one emerges. A basic need does not require 100% satisfaction before another need emerges. Most psychologically healthy people have satisfied all their basic needs at least partially. This emergence of a basic need is not a sudden steadfast happening but rather an appearance from a state of nothingness. Every person possesses a baseline or a minimum threshold for need satisfaction. Realistically, as the hierarchy is ascended, each basic prepotent need is satisfied at a lesser degree. If prepotent need A is only satisfied 5% then need B may not be present. However, if need A is satisfied 25%, need B may emerge 5%; as need A becomes satisfied 50%, need B may become 10% satisfied.

As a person experiences this hierarchy of need through his individual maturation process, he must overcome obstacles and pressures to meet the gratification of his needs. This is necessary to fulfill his prerequisites for the fullest development of his human potential.

This, however, is not enough. Even after a person has realized his true potential, his curiosities impel him to know more and more details in the arts and sciences. These details begin the formation of a new framework of organization: a hierarchy in the search for meaning. These acquired details whether isolated or related are theorized,

analyzed, organized, and pondered in an effort to look for relations and meanings to construct a new system of values and beliefs about the unknown and unfamiliar.[19]

These two sets of hierarchies (basic needs on the one hand and the desires to know and understand on the other) are interrelated rather than sharply segregated. Each serves to complement the other: the more this individual knows and understands about the environment, its inhabitants and their philosophies, the more likely he will serve to gratify his basic needs. When the satisfaction of all basic needs is reached, he is even more able to concentrate on his curiosities to know and understand. The overall image portrays a human being maturing physically and psychologically to realize his true potential as an individual.

Clinical Hierarchy of Needs

Although a human being may possess basic needs, such as those for survival, which require satisfaction, that same human being may also possess other needs according to the various roles he plays as a person. For example, a patient within the health care system has clinical needs similar to those in Maslow's hierarchy, which not only promote physical "survival" within that health care system but allow that person to mature psychologically as "the patient". Using the framework of Maslow's hierarchy of need as a reference, a hierarchy of basic clinical needs of the patient may be extrapolated. The pyramid's base once again includes the physiological needs to promote species survival. The human body requires oxygen to maintain respiration; food for protein synthesis, energy release, and overall growth and maintenance. All

other needs become of secondary importance until these basic needs are satisfied. Without them, the body withers and dies. Satisfaction of the physiological needs then provides the foundation for the emergence of the second basic need: safety.

The basic need for safety parallels the clinical need of good health. For the patient, good health offers a form of protection from invading pathogens. When the body's protection mechanism (such as the immune system) fails, the body usually succumbs to infection. Recognizing the lack of this basic need of good health (through such symptoms as fever, malaise, headache, etc.), the patient decides whether to seek care and if so, from whom. The decision-making process may involve the assistance of other family members, neighbors, friends and so on. This type of lay referral system can be very influential in determining the patient's activities.[20] If the patient decides to ask the expert opinion of the professional health referral system, he may consult his pharmacist for assistance in making the initial decision to seek medical care. Pharmacy is frequently a gateway to the health care system leading the patient to a formal diagnosis and treatment.

Since the patient's perspective on his medication beliefs have been a subject of neglect due to the unquestioned authority and empirical knowledge of health care professionals, the purpose of this research is to identify those beliefs which the patient feels are beneficial to his general understanding about health care and medications.

OBJECTIVES

The present descriptive ethnographic study explores the personal organization of beliefs held by patients. The following study serves to accomplish the following objectives:

1. to discuss the sick role model and the influence of health care beliefs within this model as substantiated in the medical literature
2. to identify the beliefs held by patients about physicians' and pharmacists' intervention of health care and education *in situ*
3. to identify the beliefs held by patients concerning medications in general, their use of medications, and their understanding of the use of medications, and
4. to identify the beliefs held by patients concerning the present role of medication education which the patients feel would benefit their overall understanding of medication.

METHODS

This descriptive ethnographic study design utilizes a nonrandomized approach with an interview format as the data-collecting instrument. The study protocol and patient informed consent form were approved by the University of Utah Institutional Review Board.

This study, occurring during the months of October 1984 through January 1985, involves 25 patients on the University Hospital Rehabilitation Unit. Some of the medical conditions of the patients on this unit include spinal cord injuries, strokes, head trauma injuries and multiple sclerosis. (Appendix 1 contains a complete overview of the Rehabilitation Unit, its patients and its programs.) Since this study incorporates an interview format, only those patients with intact cognitive capacities are asked to participate. This study excludes patients who are unable to intelligibly express themselves verbally. The decision to allow a patient who wishes to voluntarily participate in

this study is made collectively by the investigator, Patricia L. Orlando (Clinical Pharmacy Resident), Jean K. Devenport, Pharm.D. (Rehabilitation Clinical Pharmacist), and the attending physician. Patients of both sexes, age 18 years and older are asked to participate. Informed consent is obtained from each participating patient. (Appendix 2 contains the informed consent form.) Each interview is performed at a time which has been designated as convenient by the patient, his physician, nursing staff and therapists. Each patient has opportunities at any time during the interview to stop that interview due to fatigue or other circumstances. Another interview time is then determined. Each interview is conducted on the rehabilitation unit. (Appendix 3 contains the interview format.)

This research involves the elicitation of patient views by an interview format to assess those needs which patients feel are important to their medication education. The data are treated in a descriptive manner identifying beliefs and needs within this specific patient population. This interview through the identification of patient held beliefs serves to generate rather than to test hypotheses concerning the scope of these beliefs. Once these medication and health beliefs are identified, a hierarchy of clinical need is created to support a clinical recommendation for improved patient medication education. (See Appendix 4 for a detailed description of the research procedure.)

As stated previously in the Objectives, the purpose of this descriptive ethnographic study is to explore and identify basic beliefs, especially those relating to the understanding of medications, within this particular rehabilitative patient population. The identification of these beliefs serves to aid health care professionals' appreciation

and understanding of the needs of patients relating to medication education. The patients within the health care system, including those on the rehabilitation unit, demonstrate behaviors which comprise "the sick role". To facilitate this belief identification process, the medical-anthropological literature must be explored to gain insight on the behaviors of sick people.

Sometimes in order to maintain a stable form of health, a patient may be required to follow special diets, special exercise routines and/or specifically tailored medication regimens. The patient realizes that the satisfaction of the basic need of health requires one or all of these services. In the case of medications, the pharmacist usually is involved with the initiation of therapy by providing medications necessary to modify the diagnosed condition as well as acting as a consultant to physicians and other health care professionals in the selection of proper medications.

Because the pharmacist serves as a link between the lay referral system and the professional referral system, he acts as a reinforcer to help the patient maintain the satisfaction of good health by providing information on drug use and side effects. The patient begins to appreciate the importance of medication refills especially for chronic conditions. He may even associate health maintenance with the positive reinforcements provided by the pharmacist. The use of the medical services will hopefully result in a favorable outcome or a modification of need such as the cure of disease, relief of symptoms and the restoration of good health.

As the patient begins to appreciate the importance of good health, he realizes the vital role he plays in this health care system. The

realization of this important placement parallels the third basic need of Maslow's hierarchy of need: that of belongingness--a place in the family, society, the health care system. This role of the patient, the seeker of medical care services, completes the integrated relationships between the pharmacist, physician and other health care professionals. The patient contracts the disease, experiences the symptoms, and presents to the health care practitioner with complaints. The patient requires the diagnoses, the medications, and the prognoses. Without the patient, the health care system would serve no useful role; all research for new medications would have no function.

By realizing the important role which the patient plays in the health care system, the patient achieves a level of self-gratification. This parallels the self-esteem need of the Maslow hierarchy. With this self-gratification comes respect for oneself and others, confidence and recognition. The patient realizes that he and he alone is the sole recipient of health care. He is the common link between the pharmacist and physician stressing the importance of good health care.

The final maturation step of this self-gratification is self-actualization--becoming all that one is capable of becoming--in essence, the ideal, holistically integrated patient. This patient appreciates the importance of good health as well as the significance of his actions necessary to maintain his health. The alleviation of symptoms and the modification of chronic disease are a reflection of the degree of patient compliance.

Once again, this final maturation step is not enough. As stated previously, the patient possesses a baseline for the satisfaction of his basic clinical needs. As he attempts to meet these needs, he is also

impelled to satisfy his ever present curiosity to know and to understand the unfamiliar: Why does my body act this way? What is high blood pressure? Do I understand how my medications work? Why are the special medication-times so important? While satisfying basic clinical needs, the patient acquires various details to form a new framework of understanding surrounding his beliefs about medications and health care. This latter idea portrays the final phase in Maslow's hierarchy of need: the need to know and to understand.

RESULTS: THEORETICAL DIMENSIONS

Relevance of Health Beliefs in Illness Behavior: A Question of Context

Health care professionals represent a medical system which may only satisfy a fraction of the healing needs of its patients. Irwin Press comments that the fault does not necessarily arise in the practitioner himself, but rather in the disjuncture between medical, social and cultural orders.[21] The responsibility for ameliorating such nonmedical problems involves an active sensitization of the practitioners to the cultural and social consorts of disease and healing.

Incongruencies arising from this disjuncture involves an analysis of two major tasks. Since the expertise of the health care professionals lies in the somatic elements of disease and healing, a greater emphasis on the symbolic phenomena (beliefs) of the culture of the patients is necessary to enhance therapeutic relationships and medical outcomes. The other task involves the actual manner of translation of this expertise into relevant recommendations for the patient.

As the years pass, a growing concern with the biomedical care, motives and effectiveness is evolving in health care. Critics such as Illich, Szasz, Knowles, Friedson, Dubos, and others choose to condemn the impersonality, unintelligibility and monopolistic characteristics of health care professionals. A main criticism involves the professional's abandonment of concern for the "whole patient". A definition for the "whole patient" varies from the unsanctified to the astrological of elements. Most elements, however, involve the behavioral aspects of disease, namely "illness".

Health care professionals who realize the distinction between disease and illness tend to evaluate "illness" in strictly behavioral terms. The concern for illness treats more than the behavioral symptoms produced by the disease. The sensation and severity of these symptoms to the health care professional and the healing process are actively influenced by symbolic beliefs.[22]

All patients, whether rich or poor, express sickness both behaviorally and symptomatically in a symbolic way. Every disease studied by man is labeled with various images and symptoms which act as a template for expected patient responses. Colds, influenza, appendicitis and high blood pressure have well delineated reputations for the sufferer. The literary notariety of cancer and tuberculosis have increased the public's awareness to seek appropriate medical treatment. Fabrega remarks that, "The bulk of medical complaints that physicians practicing in industralized nations are called upon to treat are subject to considerable cultural masking or distortions."[23]

Culture may play a significant role in the sensation, interpretation, presentation and healing of symptoms. However, the

actual origins of these symptoms, both behavioral and somatic, also influence the recovery process. For example, the relief of placebo-treated pain is attributed to an endorphin-related model.

Moerman relates that, "The symbolic component of medical treatment is significant...." He remarks that a placebo may be 30-60% as effective as some active medications for some patients due to the symbolic concomitants of the healing act. The resulting fraction is due to the actual active ingredient of the medication.[24] Kleinman and Sung note that a cultural healing occurs when any medical system implements a plan, mobilizes defenses and gives treatment.[25]

Once again, all human episodes of sickness involve a form of cultural healing and symbolic meaning. In order for the practitioner to appreciate the healing beliefs of various cultural groups, he would need advanced education and field work in anthropology. This would be impossible since the ethnicity of this patient clientele is probably mixed and varied...an unrealistic expectation.[26]

Besides this ethnic heterogeneity, the health care system model does not have an accessible place for cultural input to health practice. The "bedside manner" and "art of medicine/pharmacy" (including the interpersonal aspects of the practitioner-patient relationship) constitute some behavioral elements of health delivery which are usually learned "on the job".

Health care professionals share their own set of logic, values and beliefs distinct from their patient sector. The sociocultural pool of practitioners is fairly homogenous, usually of the middle to upper class society. Practitioners bring to their practice personal views of the family element, of society, of conformity to the society's standards, of

the industrial world's view--variants which enhance further ignorance in the practitioner's own culture let alone those cultures of his patients.[27]

Besides personal views, health care professionals bring extensive amounts of education and training to their practice. This precludes even the majority of upper class patients from ever attaining such knowledge. This lack of scientific background does not imply that patients lack a complex pattern of belief networks relating to disease and healing.

The patient's response to this lack of knowledge is to fit the disease and its meaning into his own personal viewpoint allowing less anxiety and more receptivity to treatment. Building a personal explanatory model also builds and strengthens the patient's defense mechanism. The health care professional can activate a powerful tool for healing by accepting the patient's explanatory model, and generally realizing the significance of the patient's perception of "illness".

Waitzkin demonstrates these ideas in his clinical example in which a female patient believed her thrombophlebitis was secondary to the anesthesia during her operation. Her physician told her that prolonged bed rest can cause such problems rather than the drug. To the patient, bed rest is associated with healing and recovery and not a dangerous condition. The patient also feels the focus of attack is upon her personally since she is the one in the bed. To prevent counterproductivity, the physician may incorporate the patient's model to suit his own needs to further the recovery of the patient. "Well it's unlikely the drug caused the phlebitis but we'll be sure to have the nurses help you to move around often." As long as the patient's

belief model is part of the therapeutic consideration, the physician enhances the patient-practitioner interaction. However, the physician or pharmacist's job does not require the defending or teaching patients the essentials of a biomedical paradigm.[28]

Sickness can be inconvenient for the patient. Besides inflicting somatic consequences, sickness can disrupt habits, interactions, desires, and self-image as well as income flow and geographic conveniences. Such factors may increase anxiety in the patient who threatens to leave the hospital against medical advice. Taking a few empathetic minutes to understand the patient's hardships can reduce anxiety and complement the physician-patient interaction.

As stated previously, the illness-explanatory model of the patient must be reinforced to some degree by the health care professional. Modern medicine creates impersonal experiences for the newly founded patient as well as the chronically ill patient. This person is removed from his own habitat, transformed into the "patient" in a world of impersonal healers and machinery. Even worse, the patient must "fit" the disease model including symptoms, syndromes and cures. Since the practitioners only consider the relevant symptoms presented by the patient, the patient tends to offer more symptoms. By the process of elimination, the patient may have a better chance to have a few of his "own" symptoms accepted. Thus, some element of control over his illness is left for the patient.[29]

The patient may also be confounded by the medical jargon. This language is designed to allow standardized communication between health care professionals, not the patient-practitioner interaction. This language serves the needs of the practitioner while establishing a

professional legitimacy with the patient, if necessary. Proper translations for the patient should be incorporated into the conversation by the practitioner.

Practitioners may find it difficult to communicate at the patient's level. Medical jargon becomes so commonplace for the practitioner that layman's language actually becomes foreign. Meanwhile, the patient becomes more confused with terms such as "congestion", "paralysis", "fetus", and "high-risk factors". Where such words conflict or contradict long-held beliefs, the patient's confusion becomes even more entangled.

Besides the confusion of technical medical jargon, many physicians "look alike" to many patients. The health care system, educational experiences, and technical wizardry of science create this indistinguishability. The practitioner and his medicine are a byproduct of this "science"--the final authority--No longer does the patient-practitioner interaction hold a magical mystique but rather a technological know-how.

This expanded technology also creates further problems for the health care professional with more incomprehensible jargon, advanced training, diagnostic procedures and unheard of drugs. He becomes a wizard of sorts setting him apart from everyday life. When diagnoses are indeterminate, the patient may feel more stressed since his condition does not fall into the defined model. One point must remain stressed by the health care professional: The health care professional remains human. The technological progress offers the patient a systematic approach to diagnoses with fewer blind alleyways.

Besides being a healer, the health care professional's image is also one of a money-maker. The "desire to heal mankind" is no longer the only career motive. Resentment underlies many beliefs held by the patient who feels trapped by the ever-growing medical profession (similar to the once monopolistic phone company). To escape this medical model and to still maintain some personal control over his illness, the patient resorts to home medications such as herbals, rituals, diets and old prescription drugs. The health care professionals who discourage traditional remedies mitigate the dependence and confidence in the biomedical model. The patient is more likely to attribute cure to the traditional rather than the medical treatment.

The health care professional ideally should be an expert of anthropologic studies as well as theologies and psychologies. Since the patient-practitioner interaction involves expressions of societal, cultural, and ideological phenomena, these exposures will enhance the interaction. Of course, these capabilities are highly unlikely in one lifetime but such an awareness by the practitioner facilitates confidence and trust in the relationship. One of the basic problems facing the health care model involves the wide separation between itself and everyday life. Methods to lessen this gap include the patient's awareness of disease, the agreements reached by the practitioner and patient, and the recognition of anxieties expressed by the patient. At this point, cultural healing begins. The specific medical treatment may be more welcome and received by patients. Since the patient continues to be stimulated by various external factors (culture, theology, and the like) even after the onset of illness, the medical model has to

recognize the existence of such conditions which may influence the therapeutic and medical outcomes.

The overall goal of health care today involves a curative premise consisting of a mandate to heal. This expression is noted by the Hippocratic Oath, circa 460 B.C.:

> I will use treatment to help the sick according to my ability and judgement, but I will never use it to injure or wrong them.

Hospitals and clinics are designed to allow patients to pass through the health care system, not to remain within it. The curative premise has largely become obsolete as patients present with chronic debilitating diseases. For health care professionals, achieving the curative premise becomes a frustrating and disillusioning experience.

Several changes, as noted by Kassebaum and Baumann, in the American sick role have developed over the past 50 years. Instead of describing their health in terms of specific reference points, people now define their health in terms of "ill" and "well". When asked "how are you", a person responds "I am fine" or "I feel sick". Seldom does a person say "My head has 10% of a cold while the rest of me is okay". In urban society, the states of health are mutually exclusive: A person is either well or ill, not both. In rural contexts, health is defined as an ability to function at work. For example, a secretary with a cut finger can still type while a construction worker with a broken leg has to take sick leave.[30]

Linda Alexander comments that the types of symptoms constituting illness have also increased. This is probably due to an increased public awareness of health and illness.[31] Illich (1975) reasons that this change is due to the medicalization of health. Life turns from a

succession of different stages of health into a series of periods requiring different treatments. People have become patients without being sick.[32]

Another symptomatic-type change which has occurred in the patient populations includes a new criterion for ailing--those illnesses which share no medical justification. This phenomenon has been noted as hypochondriasis or malingering.

Illness, whether it be imagined or real, does involve social rewards for such behavior. These rewards include monetary gain from third party compensators; interpersonal gains such as sympathy and attention; freedom from responsibility such as work.

Illness behavior changes are expected to evolve with the various medical technological advances. Medical interventions are more effective and more contributive to the chronically-ill population. Diseases such as tuberculosis are now modified by therapy. Palliation has become an alternative to cure especially in the case of the terminally-ill patient.[33]

The Sick Role Model

The sick role formulation, as noted by Parsons, posts illness as a social deviance, especially that of chronic illness which deviates from the curative premise or the norm. (The deviance may also include exceptional behavior as in "pretending" to be sick.) Parsons goes on to say that,

> The stigmatizing of illness as undesirable, and the mobilization of considerable resources of a community to combat illness is a reaffirmation of the valuation of health and the counter-vailing influence against the temptation for illness, and hence the various components which go into its motivation, to grow and spread.[34]

Parsons also adds with Fox that,

> As we have already emphasized, illness is very motivational in origin. Even in those instances where the etiology of the disorder is primarily physicochemical, the nature and severity of symptoms and the rate of recuperation are almost invariably influenced by the attitudes of the patients.[35]

Parsons' sick role proposal is composed of four elements: two responsibilities and two privileges. The two privileges include being excused from further role obligations and that the illness is involuntary. The two responsibilities include the active participation by the sick person to alter the sick state (by seeking and cooperating with resources such as the physician) and to show a motivation to vacate the sick role (through patient compliance and desires to be healthy).[36]

Kleinman and associates offer a distinction between illness and disease as expressed in the sick role:

> Modern physicians diagnose and treat 'diseases' (abnormalities in the structure and function of body organs and systems), whereas patients suffer 'illnesses' (experiences of disvalued changes in status of being and in social function; the human experience of sickness.[37]

Chrisman also points out that:

> Illness-related shifts in role behavior imply a 'bargaining' process in which modified rights and obligations are established with others in the social environment...Unambiguous acute symptoms place the individual in the strongest position for attaining the fullest extent of modifications in role behaviors and place upon him the strongest obligations to get well. On the other hand, ambiguous or chronic problems are not nearly so compelling.[38]

Kleinman and associates conclude that:

> Illness and disease, so defined, do not stand in a one-to-one relation...Illness may occur in the absence of disease (Half of visits to the

> doctor are for complaints without an ascertainable biologic base.); and the course of a disease is distinct from the trajectory of accompanying illness.[39]

This sick role model has implications more for the acutely ill patient rather than the chronically ill patient. In the case of the chronically ill patient, he is not exempted from his role responsibilities for the duration of his disease (which could span a lifetime). Once the disease is adequately controlled, a new health baseline is established so the patient may return to his normal or new lifestyle.[40] The chronically ill patient is responsible for his disease after the diagnosis. The issue of compliance and patient participation play definite roles in the establishment of a new health baseline.

The Health Care System as an Explanatory Model

In order to understand the role of beliefs in the sick role model, consider the health care system proposed by Kleinman. The health care model is composed of three sectors (see Figure 1): the popular sector (layman-patient), the professional sector (physician, pharmacist, etc.), and the folk sector (witch doctor, herbalist, etc.).[41]

The popular sector is the largest component of the health care system. It contains several levels of beliefs originating from individual, family, society, and community sources. In this sector, illness is first perceived and health care activities initiated. When people decide to contact professional or folk healers, their cognitive and value orientations remain rooted in the popular culture.[42]

The individual first encounters disease in the popular sector by perceiving and experiencing symptoms. The individual contemplates the severity of the disease and sanctions a sick role (acute, chronic,

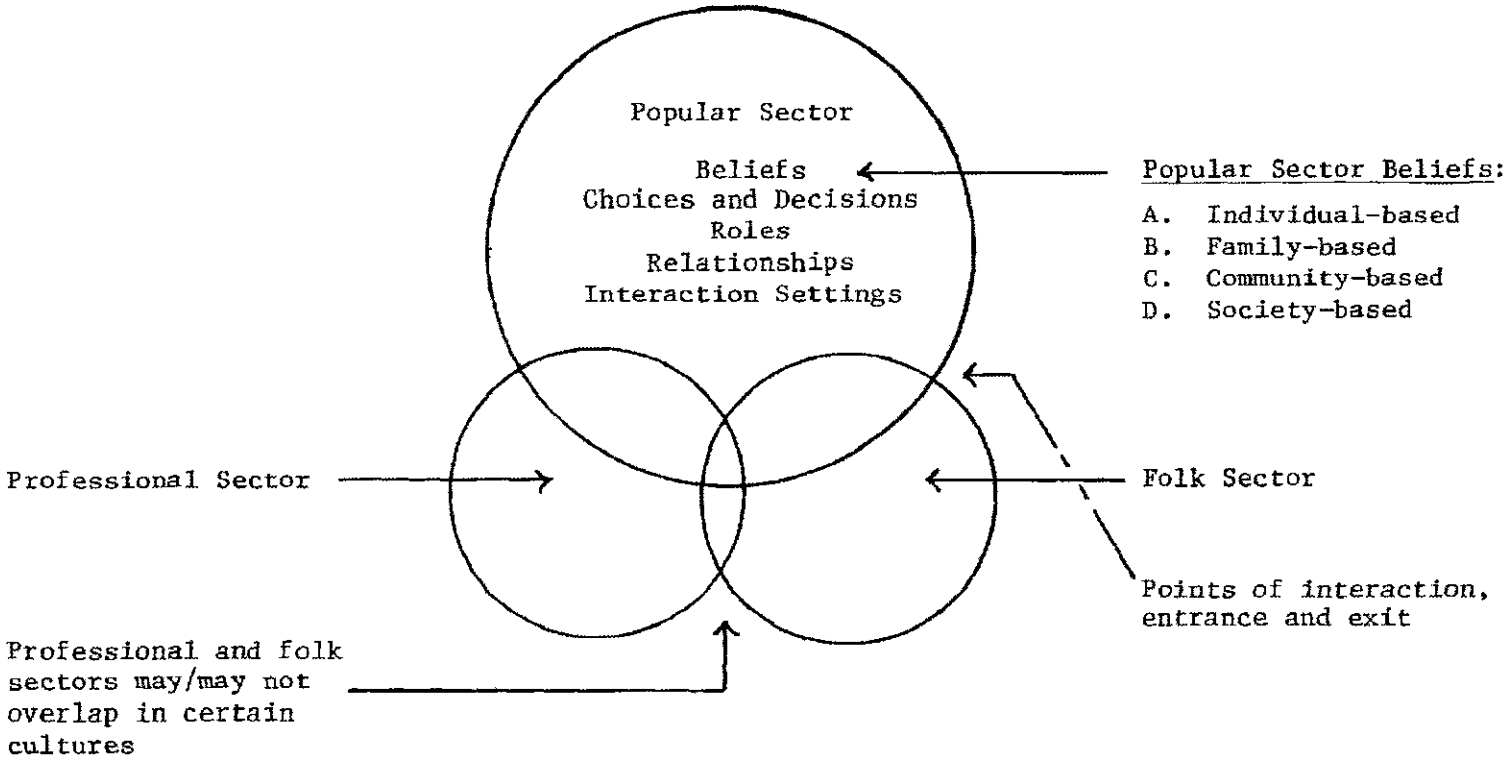

Figure 1. The internal structure of the health care system. Adapted from Kleinman, 1980:50.

psychiatric, etc.) by considering how "normal" or extraordinary these symptoms are to his perceptions. He then engages in a health care-seeking behavior and applies the appropriate treatment.

Self-treatment by the individual or his family is the first intervention usually encountered. After evaluating the results of his treatment, the individual may decide to obtain treatment from the professional or folk healers. The sick person meanwhile utilizes the beliefs and values inherent to the popular sector of that culture. Before going outside the popular sector for evaluation, the sick person can consider the treatment modalities of friends, neighbors or relatives.[43]

Once the sick person moves from the popular sector, a new set of beliefs and values is encountered in the professional or folk sectors or both. The "sick person" becomes a "patient" in the professional sector or a "client" in the folk sector. The sick person learns the entrance and exit roles of each sector. He also learns the translations of one therapeutic language to the next.

Relationship of the Sick Role Model Within the Health Care System

Dingwall provides a framework for the sick role model (see Figure 2). This model proposes an equilibrium between those events which occur in the biological sphere (the body) and those in the cognitive sphere (the conscious mind). This equilibrium involves some normal variation rather than remaining fixed. When faced with a conflict of beliefs or an alteration in the knowledge pool, the equilibrium between the biological and cognitive elements may be disrupted. For example, reading an article about breast cancer may prompt a woman to consider

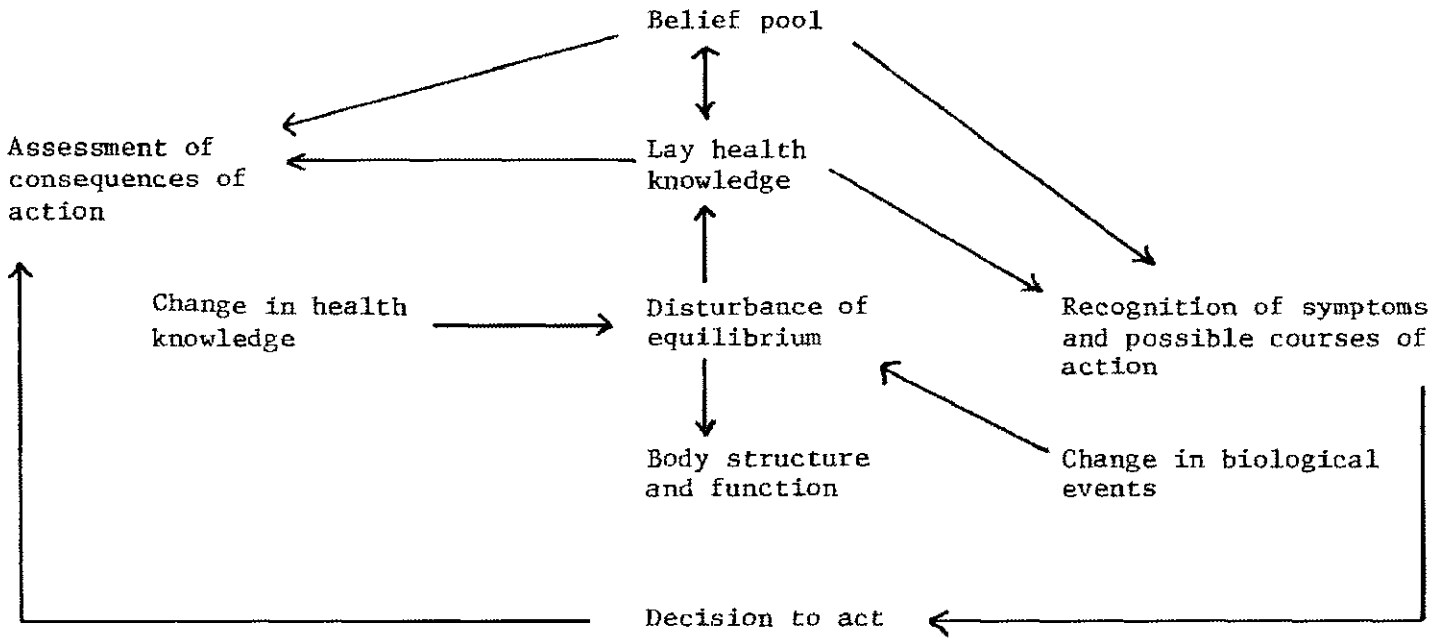

Figure 2. Basic structure of the sick role model.
Adapted from Dingwall, 1976:100.

the condition of her own breasts. She may explore the experience of her body to reconcile it with the changed knowledge (breast examination). Other symptoms or knowledge discrepancies require further identification by someone with more expertise.[44]

Dingwall further incorporates this model into a more elaborate and complex schema to show the various pathways through the sick role model (see Figure 3). The relevant aspects of the sick person's own decisions and interpretations have already been discussed. This model again embodies the recognition or dismissal of symptoms, self-treatment and help-seeking from folk and professional sources. It provides a thorough summary from the perception of health disruption (the symptom) to the restoration of the normal health status.[45]

Considering the medical knowledge focus of the patient, the medical literature has provided substantiation that health care professionals agree on general guidelines for patient medication education. The focus of this education has originated from the professionals' perspective with little appreciation for the educational needs of the patient.[46-56] As stated previously, the belief and value systems of the patient receive minimal if any consideration during the diagnostic and therapeutic work-ups.

As demonstrated throughout the medical literature, physicians and pharmacists agree that the following information about medications should be provided to patients:

1. mechanisms of drug action
2. appropriate techniques of administration
3. directions for use (verbal and written instructions)
4. potential side effects

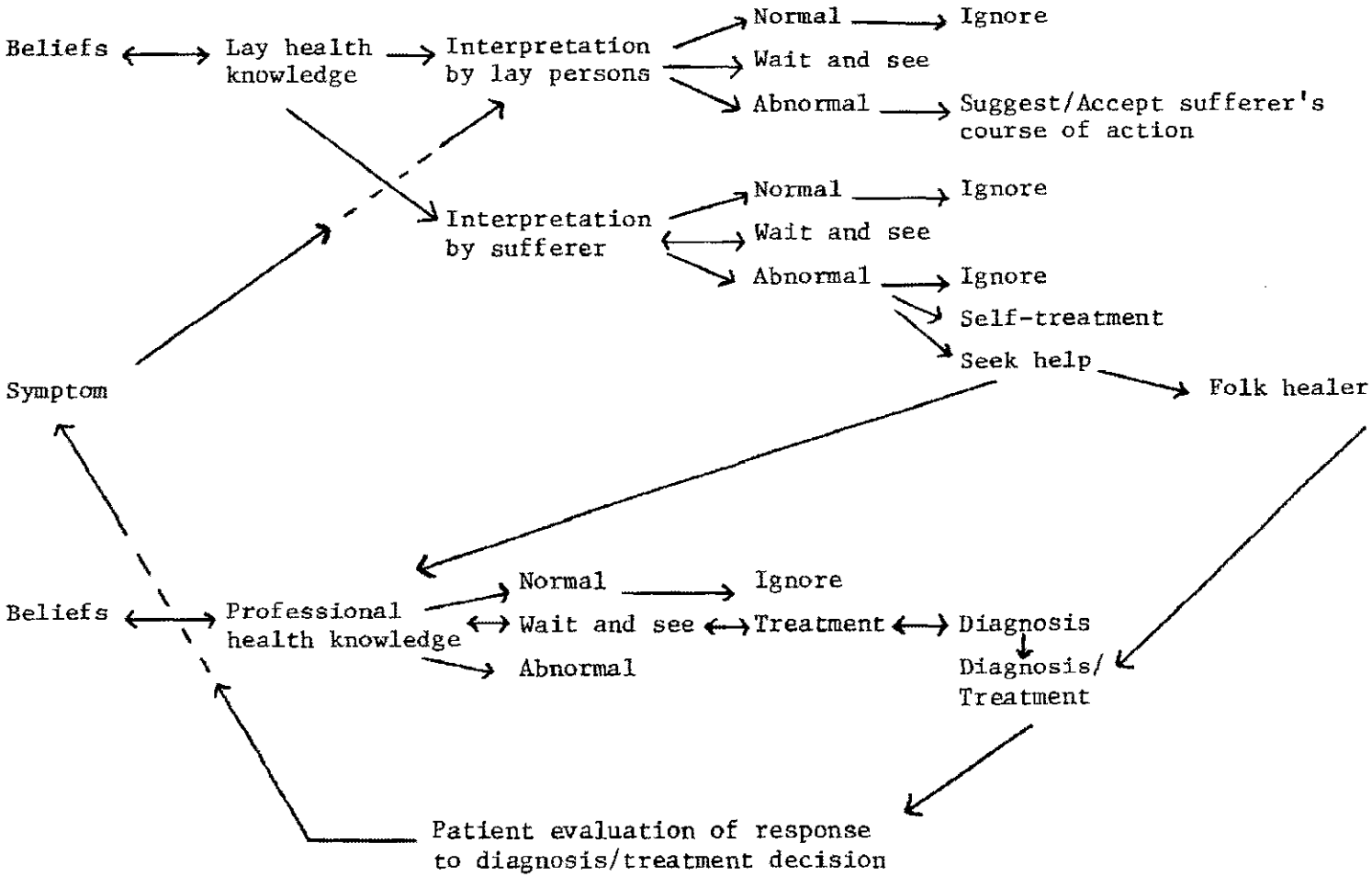

Figure 3. Some pathways through the sick role model. Adapted from Dingwall, 1976:103.

5. special precautions or contraindications
6. storage requirements, and
7. refill instructions.

This lack of appreciation stems not only from the health care professionals' view that the patient has no medical knowledge base but also from the incomplete cultural perspective (of the patient) held by the professionals.

The patient, however, continues to have beliefs about health care in general and medication use in particular. These beliefs form a framework of medication education needs which have been the object of neglect by the health care professionals. The patient identifies with these beliefs (no matter how folkloric) as a form of educational security since the medical language has created barriers to his understanding. Considering once again Maslow's theory of the hierarchy of need, one can assess these needs of people according to the motivations and beliefs which influence their learning abilities and coping mechanisms. The recognition, understanding, and appreciation of these beliefs serve to compliment medication education and act as a foundation upon which to incorporate the knowledge of health care professionals to create more productive medication education programs.

Two additional concepts affecting patients' beliefs must be a consideration. These topics include the role of trauma or a traumatic illness upon the beliefs in the popular sector which prompts the patient to seek medical attention; and the acceptance process which patients undergo after the traumatic experience which may further influence fundamental beliefs.

Impact of Trauma Upon Beliefs

People who experience life-threatening illnesses or accidents may have changes or reconvictions of fundamental beliefs. Consider the person who loses a limb or becomes paralyzed as the result of a potentially fatal car accident; or the person who loses the function of a limb after a cerebral vascular accident. This threat to life serves as a challenge to those beliefs. The influence of this existential crisis can have a considerable influence on the experience of the illness or the functional disability and recovery.

Some of the more beneficial evidence concerning the challenging of beliefs involves that of near-death experiences. Survivors of such life-threatening accidents or illnesses report that their fears of death and the appreciation for life faced a new reexamining period during the crisis.[57] This recognition of eminent death has been noted by Noyes to create a horrifying sense of helplessness. This was usually accompanied by counter-thoughts of "this cannot be happening to me".[58] Noyes goes on to say that some people feel a sense of detachment, as being an observer of the event: "Although this could be viewed as a defense against the threat of death it may also have represented a sense of reality in the face of seemingly incompatible beliefs."[59]

For others, the threat of death creates a more fragile impermanent meaning of life. Noyes (1980) also remarks that as these people saw death approaching, they felt a senseless impersonality by it. Some even remarked on the aloneness or separation from humanity.[60]

Tolstoy, in The Death of Ivan Ilych, provides a classic illustration to this response of death. Ivan Ilych, the famed character, ponders the meaninglessness of his existence upon his

deathbed. He realizes that death awaits him and explains its meaning in disbelief: The syllogism he had learned from Kiezewetter's Logic where Caius is a man, and men are mortal, therefore Caius is also mortal, had always seemed to him appropriate as applied to Caius, but certainly not as applied to himself.[61]

Kubler-Ross, in her works concerning death and dying, would have labeled this as a form of denial in her first of the five stages of dying. Here the feeling of human immortality has been threatened by death. "This cannot be happening to me."[62]

As the true reality of the situation sets in, the person's second reaction is that of anger. Here the person lashes out and bemoans such injustices of fate. Family and physicians are judged as uncaring and insensitive. The person feels that someone less deserving should be the object of this injustice. Soon this reaction too is replaced by a calmer stage, that of bargaining.[63]

The bargaining stage acts as a provision for more time for living. The person may beg God or the physician, for example, to allow him to live long enough to participate in an upcoming event such as the wedding of a son.[64]

When the person can no longer deny the illness, when he is forced to undergo more extensive therapies, when he becomes weaker and thinner and can no longer deny his condition, his anger and bargaining are replaced by a greater burden, that of depression. This is a prepatory stage for the final separation from loved ones and the world.[65]

If a patient has enough time to work through the previous four stages, he soon reaches a stage where he is neither angry nor depressed about his destiny. He has been able to express his thoughts, his envy

for those with more fortunate health, his anger at those who do not have to face an early death. He greets his coming-end with a quiet degree of expectation. This fifth and final stage of acceptance is almost void of feelings. Communications become more nonverbal than verbal as the patient makes that final separation from the human world..."There comes a time for the final rest before the long journey."[66]

Although the Kubler-Ross stages of dying are noted in a special sequence, no one person may necessarily experience the same pattern or duration of each stage. This theory is not a universal truth. While some may rotate between various stages during this very personal experience, others may avoid certain stages altogether. Because the death experience is so personal, the encapsulation of the process can be dangerous. Death may be described as the final clinical phase but the human element must still be considered as the basis of concern.

Even though the Kubler-Ross model deals with stages of death and dying, similar stages may be experienced by the non-terminal patient such as one who is paralyzed or otherwise disabled. The model provides a progression for emotional development and maturation during an acceptance process for the new condition of "lacking total body function". This "lack of function" may be perceived by the patient as a loss...the death of a limb or physical function.

Depending on the "stage" (of death in the terminal patient, of acceptance in the non-terminal patient) currently being experienced by the patient, fundamental beliefs concerning health, life, death and other matters may be profoundly altered from the previously "healthy" state. This is an important consideration to keep in mind while talking to such patients.

Acceptance Process During Belief Modifications

To appreciate the beliefs of patients on a rehabilitation unit, one must understand the process and content of the emotional aspects of rehabilitation. Every patient who enters a rehabilitation program has experienced some major loss which may be the most devastating loss of his life. The emotional significance of such physical or functional losses require careful negotiaton if the patient is to benefit from the program. Such emotional conditions include shock, denial, depression, reaction against independence and adaptation.[67]

The nature and degree of a physical or functional loss must be determined for each patient. The patient who relies on cognitive processes for his career and everyday coping mechanisms may find the loss of intellectual function devastating. The patient who relies on his hands for manual labor may show a more marked reaction and adjustment difficulties with a physical disability.

As mentioned in the previous section, the "loss of function" may be perceived by the patient as a loss...the death of a limb or physical function. A tangent from the Kubler-Ross model is demonstrated by Krueger to explain the emotional progression and maturation during the acceptance phase of such devastating injuries or illnesses.[68]

The immediate reaction to the trauma, as noted by Krueger, may involve a shock with an inability to comprehend the true severity or magnitude of the situation. This personal experience may last several hours or even days.[69]

The initial reaction may also include some component of denial which may last a few days to several months. The denial may involve beliefs that recovery will be forthcoming and complete. Denial is a

type of defense mechanism which protects the patient since acceptance of such drastic life changes is beyond almost anyone's capacity.[70]

This denial is used with the hope of a reversal of the situation in the future. Depression is not yet possible since no conscious effort has been made to recognize the loss.

As denial diminishes, the patient may experience grief and depression. Gradual onset of functional losses, such as aging, are easier to adapt than the drastic loss of a limb or bodily function. Depression is the reaction of the ego's helplessness to maintain self-esteem. If this self-esteem cannot be maintained, a depression results. The patient may feel he is a burden with nothing to offer others. The patient's main depressive reaction involves difficulties in the integration of the acute loss with a new feeling of self-concept.[71]

As the patient makes positive rehabilitation efforts in therapy and self-care to the point of achieving some independence, he may decide to react against this new form of freedom. For the adolescent who views this independence as newly achieved, any regression to dependency is threatening; for other patients, the new independence may be a threat to their protective dependence or security. Through coping and adaptative capacities, the patient continues to react to his environment in hopefully a progressive manner.[72]

In order to appreciate those beliefs of patients on a rehabilitation unit, one must understand the significant impact of trauma or a traumatic illness upon those beliefs. Such devastating episodes may either strengthen the foundation of former beliefs (before the incident) or modify the structure of future beliefs. The acceptance

of the changes inflicted upon the patients' lives by such crises may also involve further belief modifications. Any modifications in the belief pool of patients may alter the medication education needs of such patients in the future.

This medical-anthropological literature review has focused upon several important issues pertinent to this study:

1. The patient-practitioner relationship involves expressions of societal, cultural, and ideological phenomena in addition to the medical aspects of this health care relationship.
2. The sick role model provides some explanation for the behavior modifications which may occur with illness.
3. Beliefs play a fundamental role in the decision-making process of seeking medical advice.
4. Physicians and pharmacists agree on topics of information which patients should learn in medication education programs.
5. Beliefs are neither universal nor static and may be modified during the course of a traumatic personal event such as a spinal cord injury.

These insights from the literature provide the reader with a basis for the appreciation of the beliefs which are identified in the "results" section of this study.

RESULTS: EMPIRICAL DIMENSIONS

Population Description

During the months of October 1984 through January 1985, 25 patients on the University Hospital Rehabilitation Unit were interviewed concerning health care and medication beliefs. (Since this research

examines a specific group of patients, this group is referred to as a "population" rather than a "sample" of patients.)

This brief section introduces the patients; they will emerge in a more "personalized" way throughout the interview segments thereby appearing as "real people" rather than as interview "objects". The patients' names appear as pseudonyms in order to preserve each one's anonymity and confidentiality. An alphabetical list of the patients' names appears below:

Table 1. Patients' names

Iris Alzmier
Tim Ashley
Ali Bliss
Harris Brinkley
Jack Brisbo
Joe Cubb
Paul Davis
Penny Fisker
Venice Fitzgerald
Bill Fontana
Sam Ford
Peter Franklin
Patty Frazier
Kenny Greely
Graham O'Reilly
Rita Panner
Anna Paris
Margaret Pierce
Vera Randell
Brenda Savage
Rodney Shelka
Tony Sparoe
Thomas Tomkins
Steven Walker
Isaac Walton

Ages

The ages of the patients within this population range from 19 to 78 years. The mean age is 41.2 years, the median age is 37 years, and a bimodal distribution exists for 19, 24, 29, 37, and 66 years of age.

Sex

The distribution ratio of males to females in this population is 1.5 : 1.0 or 60% males and 40% females.

Marital Status

In this population, the marital status of patients is listed in the following table:

Table 2. Marital status (N=25)

Status	No. Responders
Married	13
Single	7
Widowed	2
Divorced	3

Religion

The religious preferences of the patients is listed in Table 3 below. These data are recorded from patient admission demographic forms.

Table 3. Religious preference (N=25)

Religion	No. Responders
Mormonism	11
Catholicism	2
No preference	12

Type of Injury or Illness

Overall, 18 patients have recent injuries or illnesses, while 7 patients have old injuries or illnesses. A recent injury or illness is defined as one which occurs within the last 12 months (October 1983 through the present). An old injury or illness is defined as occurring prior to October 1983 according to the dates of injury or onset of illness in the patient's chart.

Table 4 shows a more detailed distribution of patients with recent or old injuries or illnesses. A "traumatic spinal cord injury" is defined as an insult to the spinal cord as a result of a fall, motor vehicle accident or collision with a large object. "Other physical disabilities" is defined as either a paralysis or weakness which is not the result of a spinal cord injury (such as a stroke) or a chronic irreversible illness (such as a terminal malignancy).

Table 4. Types of physical impairment (N=25)

Traumatic Spinal Cord Injuries

Onset	Region of Injury Spinal Location	No. Males	No. Females	Total
Recent	Cervical	1	1	2
	Thoracic	5	2	7
	Lumbar	2	0	2
	Total	8	3	11
Old	Cervical	3	1	4
	Thoracic	0	2	2
	Lumbar	0	0	0
	Total	3	3	6

(continued)

Other Physical Disabilities

Onset	Disability	No. Males	No. Females	Total
Recent	Stroke	2	2	4
	Quadriparesis	1	0	1
	Paraparesis	0	2	2
	Total	3	4	7
Old	Paraparesis	1	0	1

Summary of Demographic Data

Appendix 5 sketches a comprehensive demographic summary of each patient including name, age in years, sex, date of injury or illness onset, diagnosis, religion, marital status and occupation. A history of each patient also is provided in Appendix 6 should the reader require more patient-specific details. To preserve each patient's anonymity, the occupations and dates of injuries have been slightly altered.

Population Description

As stated in the introduction, this is an exploratory study to identify those beliefs of patients concerning health in general and medications in particular through an interview format. (All completed interviews are found in Appendix 6.) The identification of these beliefs, which influence the patient in the popular sector, promotes an understanding of the sick role within the health care system. The identification of these beliefs within the popular sector serves to further understand the modification process these beliefs may undergo while under the influences of the health care system.

During the five-month period of field work, the duration of patient interviews varied from 1 to 4½ hours averaging 1½ hours per interview.

The interviews were conducted seven days a week according to patient convenience including the day and evening shifts.

What is "Health"?

In order to probe the thoughts of the patients on the rehabilitation unit in a systematic manner, the patients are each asked about their thoughts concerning "health". In this way, a baseline of thought is developed allowing for more specific questions and answers.

When asked about the meaning of the term "health", various responses are elicited from the patients. Upon analysis of the data, these patients provide responses which are classified into four subcategories of health: 1) Physical descriptions, 2) emotional descriptions, 3) synthetical combinations of the physical and emotional subcategories, and 4) metaphysical/existential descriptions. These subcategories are further classified according to the population's proportions in Table 5 below. (Some patients gave responses which included combinations of the above subcategories.)

Table 5. Subcategories of "health" (N=25)

Description	No. Responders*
Physical	14
Emotional	3
Physical/emotional	8
Metaphysical	6

* Responders may provide several choices

Those patients expressing "health" in physical terms provide remarks like the following:

> Health is an ever-changing condition of the body... reflects the physical shape of your body. (Tony Sparoe)
>
> Health refers to the current state of a person's body. To have good health means that a person feels good all the time with no physical complaints. (Anna Paris)
>
> Health involves a precious balance of body functions. (Graham O'Reilly)
>
> To be healthy is to be physically fit and able to exercise. (Kenny Greely)
>
> Health is a state of general physical strength and being able to walk. (Paul Davis)
>
> Having good health means a person is healthy! If I was a healthy person, I could get out of my chair and walk.... (Patty Frazier)
>
> Health refers to the act of keeping the body well through exercise and proper diet. (Brenda Savage)
>
> Health reflects the degree of the condition of the heart and lungs. (Venice Fitzgerald)

Some patients choose to define "health" within a more affective framework where the mental elements predominate. The following remarks are typical:

> Health is a personal interpretation or a personal state of mind for the tolerance of symptoms. I am healthy and may have symptoms but they do not bother me. If the symptoms begin to bother me then my health has acquired a different tolerance level. Illness can be psychogenic. (Rodney Shelka)
>
> Health is a mental state of well-being. The healthy mind allows the body to function accordingly. Health is more a condition of mind well-being than physical well-being. This pattern is conducive to the promotion of a health body...Health is a concept of mind over matter. (Bill Fontana)

Other patients find the term "health" more easy to define as a combination of the physical and mental elements of the human body. Consider the following representative statements:

> Health is made of two parts: Mental and physical health are intertwined. A healthy mental attitude consists of a good mind which thinks positively. A healthy body is promoted through balanced foods and exercise. (Tim Ashley)

> Health is a state of physical and emotional well-being. (Rita Panner)

> Health involves a total function of all body systems. Having good health allows a person to feel good physically. His mental health allows him* to cope with daily situations and his emotions. (Sam Ford)

> Health is the quality of a person to be original within his environment with habits which are active and progressive; with a mental attitude which is vital to promote physical and mental growth. (Isaac Walton)

Many patients admit that health was not an important consideration to them before the accident or the onset of the illness. Health was a matter of ignored convenience until symptoms were no longer tolerative to the patients. Defining "health" creates a certain difficulty for these patients since words are not felt to satisfy their emotions. To these people, the meaning of health acquires concepts or ideas of a more metaphysical reality. The following are typical observations:

> Health means to lack illness. (Rodney Shelka)

> The true meaning of health tends to hit home-base when a person is not really sure he will live to see the next morning...After I was diagnosed with cancer and after experiencing its rapid growth through my body and its excruciating pain, health became a prime concern of my life. I am not yet ready to die. I want to enjoy.... (Graham O'Reilly)

> ...I have not weighed it (health) very heavily in the past. (Paul Davis)

> Health is an extremely important part of life that most people do not understand mainly due to a lack

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* The use of "he" in the patients' context refers to the male gender while the use of "she" refers to the female gender.

> of concern for health. I was one of those people and now I have poor health. A person cannot possibly realize what health means until he does not have good health. It is an unfortunate realization. (Steven Walker)
>
> Health is unappreciated until a person becomes very sick. (Vera Randell)
>
> Health is a very precious component of life. It really bothers me when people do things to themselves which really aggrevate their bodies. Smoking causes cancer yet people continue to smoke. People get diabetes yet do not watch their balance of diet and exercise in the early stages. If people only knew.... (Jack Brisbo)
>
> Health is existence. (Isaac Walton)
>
> Life is health which is precious. (Rita Panner)

Health and Everyday Life

Once the term "health" is defined for each patient, the impact of health upon everyday life is then probed through an analysis of health occupations. A variety of health occupations which were held by family members are mentioned by the patient. Having one or several nurses in the family is a pattern noted by 15 patients. "Doctor" is the second most commonly mentioned health occupation noted by four patients. A wide variety of other health professions are mentioned with no dominant patterns. These professions are summarized in Table 6.

Since health foods are so widely advertised and promoted in the media, health spas and various stores, the patients are asked about their opinions concerning the use and significance of health foods. Health foods are defined according to two methods depending on the place of purchase: 1) Food products purchased in the "health food" store, 2) natural foods such as those with increased fiber content purchased in the grocery store. The most prevalent health promotion technique which is demonstrated by this patient population involves the consumption of

health foods. Table 7 notes the types of health food purchases made by some of the patients.

Table 6. Health occupations of family members (N=25)

Occupation	No. Responders*
Nursing	
Registered nurses	12
Licensed practical nurses	2
Nursing aids	1
Physicians	4
Pharmacists	2
Dentists	2
Emergency medical technicians	2
Health organization representatives	1
Ph.D. mental health directors	1
Coroners	1
Ambulance service owners and drivers	1
Dental hygienists	1
Dental assistants	1
Chiropractor office managers	1

* Responders may provide several choices

Table 7. Common health food purchases (N=24)

Types	No. Responders
Bran/whole wheat	8
Vitamins	2
Vegetables	2
Fiber-like cereals	2
Kelp	1
Lecithin	1
Nuts and fruit	1
Canned food supplements	1
Carob root	1
Sugar free candy	1
Safflower oil	1
Raw fruit juice	1
Wheatgerm	1
Yogurt	1

The various types of responses demonstrate that no single usage pattern of health food is universal. For some patients, health foods are noted as kelp, lecithin and carob root found in health food stores or drugstores. For others, shopping at the grocery store for high fiber cereals, grains, and fruits is sufficient to fulfill the health food need. Other patients choose to supplement the diet with vitamins and canned food supplements.

When patients are asked if they make a special effort to buy health foods, 8 patients state that such purchases are made frequently while 15 patients state that such purchases are infrequently made. Five patients state that health foods are too expensive to buy when compared to the food of a regular diet. Seven patients state that making a health food purchase is a personal choice or preference.

Upon analyzing the data, four subcategories concerning thoughts about health food predominate throughout the interview. These subcategories are listed according to the population proportions in Table 8 below.

Table 8. Health food considerations (N=23)

Subcategory	No. Responders
Importance of balanced diet	17
Safety of health foods	3
Nonsatisfaction of appetite	2
Health food as an alternative	1

The majority of patients believe that the concept of a balanced diet is more important than the use of health foods. This statement is further supported in the following remarks:

> Health foods are one way to keep good health...They do increase energy levels and keep the blood flowing smoothly such as with kelp or lecithin. Everyone has different tastes and may not like health foods. Too much of a good thing can be detrimental as well. A proper diet is still very important. (Anna Paris)

> Health foods are not required for everyone to eat. The key is to have a balanced diet. If I lived in California where fresh fruit is so plentiful, I would tend to eat less health food. In Nevada where fresh fruit is expensive and difficult to select, health foods become a good substitute. (Bill Fontana)

> Believe me, a good balanced diet is better than... Ensure*. (Steven Walker)

> Health food is a fad. People were eating healthy long before the health food stores were built. Natural foods such as whole wheat are good in a balanced diet. (Thomas Tomkins)

> Health foods are really not necessary to survive. A person only needs to balance his diet with the five basic food groups. (Paul Davis)

> Health foods are not necessary for maintaining good health. Healthy foods though are necessary for maintaining good health. This means a person should eat a balanced diet everyday for good nutrition. (Rita Panner)

> If a person cooks properly...he will be promoting good health. My neighbor eats health foods like a crazy woman. She has no better health than I do. (Venice Fitzgerald)

In the second category, two patients state that health foods may not necessarily be safe for human consumption. Two typical remarks follow:

> Eating health food is an individual's choice. Since they (health foods) are not prepared by doctors, health foods probably are not very healthy to eat. I believe in eating a balanced diet. (Iris Alzmier)

---

* Appendix 7 contains a listing of all brand name medications and products used throughout the interviews. The text does not designate the trademark® by such products.

> Health foods may do more harm than good in spinal cord patients since the foods may interact with medications. Labels do not give enough information on what the product will do to the body. I would only use health foods if my doctor recommended them. (Harris Brinkley)

The third subcategory cites that health foods are either not providing a satisfaction of appetite, or are not being very pleasing to the taste preferences of the patient. The following are typical observations:

> Health foods like fruit are not a favorite of mine. I would rather eat junk food. Using health food is a personal decision. (Kenny Greely)

> After I was married I still did not really understand the important elements of good health. I was a junk food junkie growing up and passed it on to my children.... (Margaret Pierce)

> I would rather eat protein in the form of a fat juicy steak than health food. (Harris Brinkley)

The final subcategory involves one patient who admits health food is a convenient alternative for people with allergies or special diseases. Brenda Savage summarizes it this way:

> The type of health foods which I buy benefit my allergic state. I buy potato chips with safflower oil, raw juice without sugar...yeasts can build up in the concentrated juices and create allergies... avoid enriched flour with all its additives.

Methods of Self-Treatment

Although health foods demonstrate a possible health promotion technique, the patients also discuss various methods of self-treatment to relieve symptoms when their health does not seem "normal". When a person is feeling ill, a natural tendency for that person is to seek

comfort in the form of a physical or emotional treatment. Close examination separates the data into four subcategories for avenues of treatment. Table 9 lists these subcategories:

Table 9. Initial treatment choices (N=24)

Method	No. Responders*
Treats self alone	21
Treats self and/or seeks medical advice	19
Seeks relative's and/or friend's advice	8
Seeks only medical advice	3

* Responders may provide several choices

Although most patients (21) state they would rather treat themselves, this treatment may involve a combination of considering the physician's advice (after self-treatment fails) and/or the advice of family or friends. Those who state they seek only the physician's advice also choose no other avenues of consideration.

Most patients state they treat themselves for minor aches and pains, colds, flu, and upset stomachs. A physician is called for persistent, intolerable or unfamiliar symptoms. Some typical remarks follow:

> Tylenol is the only medication which I use for colds and headaches. If my symptoms developed into a pneumonia picture with a tight chest and difficulties breathing, I would call my rehab doctor immediately. (Patty Frazier)

> Whenever I have a cold, I usually use lozenges for my sore throat and antihistamines for my cold...If fevers develop I usually call my doctor. (Penny Fisker)

> Expert advice from the doctor should be sought for any strange never-before-experienced symptom. An appendicitis or a fractured bone requires medical attention. I would tolerate normal body symptoms such as a stomach ache for two days and a cough for one week. (Bill Fontana)

> Colds and flu have to run their course. Medications are worthless here. I only treat myself with fluids and plenty of rest...Unfamiliar symptoms can be frightening and would prompt me to call my doctor. (Sam Ford)

> Whenever I have a headache or a cold, I will treat myself with aspirin and fluids. If the pains become severe or if strange sensations developed in my body. I would call my doctor. Otherwise, I would feel confident to use my own advice to treat myself. (Tony Sparoe)

> The only time I consider treating myself is when my symptoms prevent me from carrying on my daily routines (such as a bad bad headache, nausea or vomiting)...I would definitely call my doctor if my treatments were not helpful. (Rita Panner)

> When I am sick, I usually treat myself. If I need advice, I will talk to my mom, my sister or her husband who is a dentist. He has many medical books to look up stuff. (Thomas Tomkins)

In this population, three patients admit they only seek a physician's advice for treatment of various symptoms. Some typical comments follow:

> When I am not feeling well, I call my doctor since he is so familiar with my condition and has my health records handy. He is my friend and takes my word on anything. I will not use any medications unless my doctor tells me to do so. I do not even buy over-the-counter drugs at the store. (Iris Alzmier)

> Calling my doctor is the first course of action for me when I get a cold to get a refill on my previous cold prescriptions. (Vera Randell)

> When I feel sick, I call my doctor for his advice on how I should treat myself if at all. If more members of my family had medical background, I might consider their advice. (Harris Brinkley)

Many patients mention various ailments which they normally treat themselves. Many brand name and generic products are used for a multitude of symptoms. Table 10 displays the various products used to treat these symptoms.

Table 10. Self-treatment medications (N=24)

Symptom/Condition	Medication	No. Responders*
Colds/flu/hay fever	Aspirin	13
	Tylenol	5
	Contac	4
	Antihistamines	3
	Actifed	2
	Alka-Seltzer	2
	Nyquil	2
	Coricidin	1
	Cough syrup	1
	Multiple vitamins	1
	Penicillin prescriptions	1
	Vicks Formula 44-D	1
	Vicks Vaposteam	1
	Vitamin C	1
Constipation	Metamucil	1
Cough	Lozenges	1
	Robitussin	1
	Simple syrup	1
	Triaminic liquid	1
Diarrhea	Kaopectate	1
Fever	Aspirin	2
	Tylenol	2
Headache	Anacin	3
	Aspirin	3
	Tylenol	3
	Sinus medication	1
Inflammation/Pain	Advil	4
Sore Throat	Lozenges	4
	Anacin	1
	Aspirin	1
	Vicks Vaporub	1

* Responders may provide several choices

"Home remedies" are another prominent method of self-treatment used by this patient population. Many remedies are traditional family

recipes to help soothe a sore throat, quiet a cough, or relieve whatever ailment may be present. Table 11 summarizes this data:

Table 11. Self-treatment home remedies (N=24)

Symptom/Condition	Treatment	No. Responders*
Colds	Fluids	4
	Boil water for humidity	2
	Rest	2
	Hot tea	1
	Mustard plaster	1
Coughs	Honey/butter/lemon	1
	Honey/whiskey	1
Fevers	Fluids	1
Headaches	Pepsi	1
	Fluids	1
Itching	Baking soda bath	1
Just sick	Chicken soup	2
	Tea	2
	Hot lemonade	1
	Hot toddies (lemon/honey/ginger/whiskey/water)	1
	Ginger tea	1
Scratches	Aloe vera sap	1
Sore throats	Honey/lemon	3
	Aspirin gargle	1
	Salt water gargle	1
	Honey/lemon/whiskey	1
	Raw lemon/salt	1
	Hot lemon juice	1
	Tea/lemon/whiskey	1
	Vinegar/salt gargle	1

* Responders may provide several choices

Fifteen patients state that learning the recipe or remedy from "mother" is the most common original source. These remedies are also

learned from fathers (18%), grandmothers (9%), or the patient himself (9%).

What a "Medication" Really Is:

Patients' Definitions

Since medications represent a prevalent means for self-treatment in this population, each patient has definite beliefs concerning "what a medication really is and how that medication is important to the promotion of good health". Many patients comment that although medications are used daily by some people, thinking of a definition of "medication" in terms of their personal experiences is not an easy task. Several different categories emerge from the data as shown in Table 12. Each of these comments may be classified into several of the previously stated categories. In order for the reader to appreciate the moods and feelings of each patient, the comments are provided in full context.

For some patients, medications are defined according to narcotic and addiction qualities:

> Drugs and medications are different. Drugs are addictive like Tylenol No. 3 and morphine. Tylenol and Contac are not addictive and are called medications. (Joe Cubb)

> Medications are used to restore or maintain health whereas drugs are used to destroy health, though not necessarily by intention. Tagamet is a medication. 'LSD' is a drug. Morphine is both a drug and a medication...provided that morphine is used in the legal sense for pain control as in cancer patients... it maintains its medication status. (Sam Ford)

> A medication is a drug. A drug is anything taken by mouth or through a needle that is not water or a food product. Drugs tend to make people high like Valium or marijuana. Even though a medication like aspirin is a drug, it will not make a person high. (Anna Paris)

Table 12. Medication definition categories

1.	Drugs compose a large category which includes medications. Drugs tend to be more addictive and highly abused than medications.
2.	A medication is a drug.
3.	Medications compose a large classification which includes drugs.
4.	Medications are used to relieve physical symptoms.
5.	A medication is defined according to its dosage form.
6.	Vitamins form a separate category from medications and/or drugs.
7.	The synthetic process of a compound determines if that compound is a drug and/or medication.
8.	Whether a drug and/or medication is prescribed by a "doctor" determines its classification.

A medication is a material taken by mouth or absorbed through the skin, topically or by injection, to alleviate, relieve, or prevent complications involved in a medical problem. Medications are not addictive. Drugs are used to affect the sensory elements of the body to give relief from pain and stress on a temporary basis. If properly used, drugs play a definite function in medicine. Otherwise they are highly addictive. Medications include aspirin and Tylenol. Drugs include Tylenol No. 3 due to its addictive nature...even though it is medically legal...and members of the dope family as amphetamines, speed and marijuana. (Isaac Walton)

A medication is a legal drug which is used properly to aid the body in regaining its health. The term 'drugs' is a broad category which includes medications. Street drugs are illegal and highly abused. (Paul Davis)

Medications can be OTC (over-the-counter) or prescribed by the doctor. Drugs are only prescribed by the doctor such as codeine or Percocet. Hard drugs like marijuana are illegal and dangerous since we do not know everything about these drugs yet. (Venice Fitzgerald)

Medications are not drugs. Drugs are found with street gangs who abuse them. Drugs are addictive too. Some drugs like morphine are legal to use in the hospital but can still be habit-forming. (Ali Bliss)

Some patients choose to define medications more specifically in terms of the relief of symptoms or conditions:

> Medications are used by people to make them feel better. (Joe Cubb)
>
> A medication is a chemical or drug which is used to alleviate pains, colds or allied symptoms. (Steven Walker)
>
> Medications are drugs which are used to kill infection or pain. (Kenny Greely)
>
> A medication is a substance used to control pain or metabolic imbalances in the body. (Sam Ford)
>
> Medications may be defined as an antibiotic which is used to treat infection such as a urinary tract infection; as a pain reliever to comfort a person with a headache; as an antiinflammatory compound such as Indocin. Medications are not necessarily a cure as in the common cold but do offer a form of relief. (Ali Bliss)
>
> Medications are a subcategory of drugs. Medications help the body to correct a deficiency or relieve pain. Medications do not cause a chemical reaction but do attack foreign bodies which are causing the symptoms. (Bill Fontana)

Further analysis of the data shows that some patients describe a drug and/or medication in terms of its dosage form rather than its active ingredients or its ability to relieve symptoms:

> A medication is a drug. A drug is anything taken by mouth or through a needle that is not water or a food product. (Anna Paris)
>
> A medication is a material taken by mouth or absorbed through the skin, topically or by injection, to alleviate, relieve or prevent complications involved in a medical problem. (Isaac Walton)
>
> Only the liquid forms of cold meds and liquid Tylenol are medications. (Kenny Greely)
>
> Natural products like aloe vera, which is a natural catalyst to aid healing of the body, is not a medication since it is in the topical form and works outside the body. (Bill Fontana)

> Medications are drugs which are given as a liquid or pill to help a deficiency in the body. (Thomas Tomkins)

Upon analysis of the data, the definition of "vitamins" subdivides into three subcategories as listed below:

1. Vitamins are drugs.
2. Vitamins are medications.
3. Vitamins form a separate class from medications and drugs.

The following remarks are typical for the first subcategory:

> The classification of drugs includes the subcategory of medications and vitamins. Vitamins are normally found in the diet but whenever they are consumed outside the diet, vitamins become drugs. (Steven Walker)

> Vitamins are not medications but are drugs due to their synthetic nature. (Tim Ashley)

> Vitamins become drugs when a person overindulges in them. Vitamins are a part of a balanced diet and do not become drugs unless they are used maliciously. (Margaret Pierce)

Some patients who believe that the category of medications includes "vitamins", the following observations are typical:

> A drug falls into the narcotic description. Vitamins are not drugs but may be medications depending on the situation. A balanced diet provides vitamins in a natural way. If a person has a deficiency and requires a supplement, the vitamin becomes a medication. (Peter Franklin)

> Vitamins are medications but do carry the risk of overuse. They are not addictive. (Isaac Walton)

> Vitamins are also medications since they help relieve colds as with Vitamin C or relieve a deficiency in the body. (Harris Brinkley)

> Vitamins are also medications which provide nutrients to the body. (Rita Panner)

A few comments generate the subcategory of vitamins as a separate classification:

> Vitamins are neither a drug nor a medication. They are just vitamins and have their own class. (Paul Davis)
>
> Vitamins are neither medications nor drugs. They do not provide a specific cure. A person does not supplement their body with penicillin but does do so with vitamin C. (Rodney Shelka)
>
> Vitamins are natural products that a person cannot get hooked on and therefore cannot be a drug. (Anna Paris)
>
> Vitamins make up their own classification since they are natural products which enhance health. (Sam Ford)

The actual synthesis of medications and/or drugs determines which category these terms compose as revealed by the following observations:

> Medications are oral or IV drugs which are man-made to cure a specific illness. I am unsure if herbs are medications. All medications are drugs. (Rodney Shelka)
>
> All drugs are man-made. (Tim Ashley)

The writing of a prescription by a physician determines the classifications of a medication or drug according to the thoughts of some patients:

> Medications are pills or medicines that are prescribed by the doctor. Drugs are the healing components which make up the medication. Genuine medications include nitroglycerin for heart angina...Aspirin and Tylenol are not medications because the doctor does not prescribe them. Vitamins are not drugs or medications because the doctor...does not prescribe them. (Iris Alzmier)
>
> Medications may to OTC or prescribed by the doctor. Drugs are only prescribed by the doctor as codeine or Percocet. (Venice Fitzgerald)

The patients have definite conceptions concerning the true definitions of a medication and/or drug. The classifications of various brand name and generic products are summarized in Table 13.

Table 13. Patient examples of "drugs" and "medications" (N=24)

Medication	No. Responders*
Aspirin	4
Tylenol	3
Vitamins	3
Mandelamine	2
Colace	1
Contac	1
Morphine	1
Normal saline	1
Renacidin	1
Tagamet	1
Drug	
Dope (amphetamines, marijuana)	5
Morphine	5
Tylenol No. 3	3
Valium	3
LSD (lysergic acid diethylamide)	2
Coke	2
Amphetamines	1
Cocaine	1
Codeine	1
Percocet	1
Tab	1
Vitamins	1

* Responders may provide several choices

When a healthy state seems to deviate from the norm, a person tries to relieve himself through his own remedies for self-treatment including the use of over-the-counter products. When these remedies show no effect, the person ventures from the popular sector to either the folk or professional sectors for other sources of advice. The newly transformed "patient" encounters many influences within the professional sector of the health care system which may cause positive or negative modifications upon this patient's beliefs. This next section examines

the beliefs which patients have concerning health care professionals (physicians and pharmacist).

The Physician's Role Defined

What is the physician's role in health care? This question probes the thought processes of each patient to observe the degree of understanding for the physician's role. Analysis of the data demonstrates four distinct subcategories for the physician's role. These subcategories include the following roles:

1. Diagnosis and treatment of illness
2. Educational status of the physician
3. Patient education
4. Patient-physician relationships

The most obvious role which the patients identify is the physician's role in providing health care through the diagnosis and treatment of illness. Since the patients of this population may live on the rehabilitation unit for weeks or even months, definite opinions and attitudes are apparent from the daily interactions between patients and physicians. Typical diagnoses and treatments which are identified by the patients are listed in Table 14.

Table 14. Roles of the physician (N=24)

Role	No. Responders*
Prescribe drugs or therapy	18
Diagnose conditions	17
Perform surgeries	4
Provide follow-up visits	4
Perform physical exams	2
Write orders for nurses	2
Perform mental exams	1
Perform various lab tests	1

* Responders may provide several choices

The following comments provide more detail to support this table and provide a better understanding of the patients' feelings and attitudes:

> Doctors, or M.D.s as they like to be called, are responsible for making a diagnosis of a physical problem, for prescribing medications and operating on injuries when necessary. (Paul Davis)
>
> Doctors interpret symptoms and make recommendations to the patient to take pills or have surgery performed to correct ailments. (Rodney Shelka)
>
> A doctor runs tests to pinpoint the diagnosis. He writes prescriptions for medications to treat the illness. He asks the patient to come back to the clinic so the doctor can check on the patient's progress. (Harris Brinkley)
>
> A doctor recommends cures for physical problems and makes the patient feel better. (Iris Alzmier)
>
> My idea of a doctor is someone who makes a person feel better. (Tony Sparoe)

Although 11 patients previously mention an emotional or physical-emotional explanation for the term "health", only one patient, Tim Ashley, makes any reference to the mental component of health. His explanation follows:

> The doctor diagnoses various physical and mental problems. He may prescribe drugs to treat the problem.

Throughout the interviews, 17 responses are made concerning the educational training of physicians. Although no persons stated any absolute requirements for the medical degree, relative amounts of formal education are provided. Isaac Walton, who is familiar with medical school requirements after supporting his son who earned a medical degree, puts it this way:

> A medical doctor or physician is knowledgeable in broad basic concepts concerning medical problems. He/she analyzes these problems and if a competent decision is not reached, the doctor will refer the patient to another more specialized area of medicine. A doctor knows the patient's bodily systems and his heredity. The doctor attends various seminars around the country to keep abreast of all the changes occurring in medicine.

Over the years, many people develop long-lasting friendly and trusting relationships with family physicians. Many people, including several of these patients, agree that this relationship is an important aspect of the patient-physician interaction in health care. Some typical comments concerning the nature of these present relationships follows:

> The doctor and patient are a team and each one depends on the other to be honest. (Margaret Pierce)

> A doctor...gives security to the patient by showing concern. A physician should tell the patient about his complete health picture so that the patient can realistically set his goals for restoring his health. Honesty is the best policy so that the patient is given the chance to come to terms with some emotional issues. (Sam Ford)

> Doctors have all the answers. They spend many years in school to receive a good education and many years in practice helping people. I place all my faith in my doctor as a friend and physician. (Jack Brisbo)

> Doctors should be...able to admit when they are not truly sure about a definite diagnosis. Otherwise the doctor can create a great deal of stress for the patient. (Ali Bliss)

Patient-Physician Relationships

Some of the patients are more critical about the patient-physician relationship. This is a result of poorly productive interactions between these two parties. One definite theme involves the lack of time spent per patient visit by the physician. The physician covers topics

which are vital to the visit but the patient feels at a loss due to not having enough time to think and ask appropriate questions. These views are discussed by the following patients:

> They (physicians) are underworked and overpaid. Nurses do 95% of the work. The patient sees the doctor possibly ten minutes...if he (patient) is lucky. The doctor receives all the credit...Some of the residents do all the talking and then leave and I really wonder if they even care about me.
>
> My discussions with the physician are too brief...The rehab doctors act too busy...My family doctor handles the situation entirely different. He goes out of his way to keep my family's general welfare in mind...This personal touch really adds a wonderful warmth to our relationships. This is the key which many doctors lack. (Paul Davis)
>
> My impression of most doctors is not complimentary... due to their lack of being informative to the patient... Doctors do not make an effort to get to know the patient personally. This lack of personalization hinders the doctor to really know what goes on at home versus what the patient discusses in the clinic. I move around the country and know for a fact that doctors do not make this effort. This lack of personalization is reflected in the cut-and-dried conversations carried between the patient and doctor. The disease and treatment are discussed but the patient really has no input. If input is given, it is not considered in the final treatment plan. (Bill Fontana)
>
> Some M.D.s talk down to the patient because they (physicians) cannot deal with common people. The high degree of education and egotism makes them this way. I appreciate the nine-plus years required for the degree. Some M.D.s forget the basis of medicine: the patient. This results in the disease being treated but not the patient! The patient has a responsibility too that is sometimes overlooked: the patient has to show enough concern over his body to know when the physician is not showing enough concern for the patient! It all balances out that the patient has to look out for himself. (Sam Ford)
>
> My family physician will talk...as long as I talk! A good physician must have a willingness to talk and listen. Many doctors lack any type of bedside manner. I find it aggrevating! Bluntness serves no role in health care! (Isaac Walton)

This patient population stresses that the two main elements required for a productive patient-physician relationship include 1) an honest relationship where the physician provides the patient with up-to-date progress reports once a diagnosis is known, and 2) a genuine concern for the patient's welfare. These two components are interlaced throughout the patient interviews. Both facts are interrelated as well. Honesty in a relationship allows the patient to feel the physician is treating him on a one-on-one basis. The patient can set more realistic goals toward a patient recovery in the open relationships rather than allow the patient or his family to develop false hopes of a complete recovery which may never occur.

The Pharmacist's Role Defined

Since the community pharmacist tends to be more accessible to the general public than the physician, lay persons may tend to have more personal and realistic viewpoints of the pharmacist's role in health care. Analysis of the data reveals two distinct roles for the practicing pharmacist:

1. Role in dispensing medication
2. Role as an educational consultant

All patients (100%) describe the pharmacist's health care role as being involved with the dispensing of medications as well as acting as an educational consultant to the patient and physician. Eleven patients also comment further on personality traits which enhance each of the above roles. The following comments support the pharmacist's roles in dispensing medications as well as educating the patients:

> The pharmacist plays a big role in health care. He fills the prescription according to the

> doctor's directions and types proper labels. The pharmacist will sometimes even talk the customer out of buying a certain over-the-counter medication if he suspects a more serious problem. He recommends that the customer visit a doctor to check his problem. (Harris Brinkley)
>
> The pharmacist is a ready-information reference for the doctor and patient. He prepares medications, develops personal relationships with patients because he has time to answer questions, to be helpful and is very accessible. (Steven Walker)
>
> The pharmacist controls the use of drugs. He is responsible to know the action, side effects and directions for use for a drug. The pharmacist has more specific training and education concerning drugs than a doctor. The pharmacist... provides more detailed explanations to the patient. (Thomas Tomkins)
>
> The pharmacist is the drug expert. (Patty Frazier)
>
> The pharmacist fills the prescription which the doctor writes. He is a very good source of information to tell patients the use of drugs and ingredients of products. (Venice Fitzgerald)
>
> The pharmacist in the drugstore dispenses medications on a prescription basis. The hospital pharmacist tends to be more aware of each patient's health record. (Jack Brisbo)

Certain personality traits are complimentary to the pharmacist to enhance patient understanding during the medication education sessions. Some patients note these traits allow for more productive patient-pharmacist interactions. The following remarks are typical:

> A good pharmacist is pleasant, attentive to the patient's needs, comfortable to talk to, and has a gift of gab. (Penny Fisker)
>
> ...pharmacist who has been very helpful to answer my drug questions...(by being) friendly and tells me jokes. I feel comfortable around her (the pharmacist) and she makes me feel like my opinion is just as important as her opinion. (Anna Paris)

> The pharmacist should be friendly, casual, and not rushed for time. This type of personality makes me feel more at ease. (Thomas Tomkins)
>
> He (the pharmacist) is easy to talk to and I think he likes to hear my questions. He is friendly, willing to talk, makes me feel at ease and keeps no information from me. (Patty Frazier)
>
> ...I find the pharmacist to be highly professional, factual and confidential.... (Isaac Walton)

Health care interactions whether the patient-physician or patient-pharmacist type involve many terms of medical jargon used in conversations. The patient while in the professional sector of the health care system has to translate many of these terms to fit his mode of understanding. Terms such as physician-doctor, drugs-medication, addiction-dependency, serious disease-terminal stages or cancer-malignancy may create different conceptions within the minds of patients. These interpretations may influence patient beliefs as well as overall understanding of the health problem. The patients in this study define the term "druggist" according to their own beliefs and experiences. Three distinct categories are demonstrated in the data and follow in Table 15.

Table 15. Definitions of "druggist" (N=24)

Definition	No. Responders
Non-pharmacist	12
Pharmacist	10
Unfamiliar term	2

Those patients who believe the two terms (druggist versus pharmacist) are synonymous state that either the two words are "the

same" or that "druggist" refers to an old-fashioned name for a pharmacist. Rodney Sheika summarizes this idea by saying,

> A pharmacist is the same as a druggist. The latter term is just more old-fashioned. Did you know that in the very old days, the drugstore used to be called 'the apothecary'?

Although Ali Bliss thinks the two terms are synonymous, she has some reservations:

> The term 'druggist' sounds like a drug dealer but I believe it refers to an old-fashioned term for a 'pharmacist'.

Twelve patients believe the two terms are not synonymous and agree that a pharmacist is a highly trained individual with a drug-related education. The druggist is a clerk-type person who handles few if any drugs. The following comments focus this perspective:

> I know they (pharmacists) are required to have four years of college. A druggist is only a clerk. (Joe Cubb)

> A druggist is the operator and owner of a drugstore. He tends to be a jack-of-all-trades and can dispense some drugs. A pharmacist is hired to work especially with the drugs to dispense prescriptions. He works behind the counter. (Jack Brisbo)

> A pharmacist has a formal education specializing in medication use. A druggist is an apprentice with some basic drug knowledge. (Brenda Savage)

An interesting comparison of these two terms is noted by Steven Walker, a retired pharmacist. He remarks that,

> A pharmacist and druggist are two separate people. A pharmacist is a highly professional individual who practices pharmacy in a hospital. A druggist runs a drugstore and sells candy and peanuts!

This pharmacist, who is 78 years old, remembers the drugstore of yesteryear where prescriptions were not only compounded and dispensed

but also where peanuts were roasted on the warmer while "kids" stood around the cola fountain.

In reference to the clinical aspects of pharmacy with an emphasis on patient education, especially medication education, the patients in this study provide input about their feelings concerning the roles of physicians, pharmacists, and other health care professionals in the area of patient education.

Providers of Patient Education

The main topics of discussion include:

1) Who is the most helpful to teach patients about their medications?

2) Who is the best prepared individual to teach patients?

3) From whom would you prefer to learn about these medications?

The design of these questions provides a base for constructive criticism or beneficial compliments which may improve the current patient-health care professional communication network and ultimately the education process.

Table 16 is a summary of these data. Since the patients' responses include only physicians, pharmacists and nurses in the discussion, other professionals are excluded.

Table 16. Patient perceptions of medication education providers (N=21)

Professional	Most Helpful	Best Prepared	Preferred
Physicians	0	2	8
Pharmacists	14	17	11
Pharmacy residents	2	2	2
Nurses	5	0	0

These data demonstrate that pharmacists tend to be the most helpful, best prepared educators for patients concerning medications. Pharmacy residents (graduate pharmacy students pursuing the Doctor of Pharmacy degree) probably have lower response scores since staff and patients usually consider them as "pharmacists".

"Providing too little information to the patient" is cited as the main disadvantage of physicians as patient medication educators by three patients. The following three comments summarize these feelings:

> I sometimes think that the doctors do not want the patient to be fully informed. The doctors only state the name and dosage of the drug which does not satisfy my needs. (Paul Davis)

> Doctors do not discuss detail because they are too busy with other physical problems. (Ali Bliss)

> The doctor mentions one or two side effects and I usually end up developing the third side effect which he did not mention. (Margaret Pierce)

Another patient who prefers learning from the pharmacist shares his feelings on this deficiency of the physician:

> The physicians on rehab tend to only concentrate on what the drug is used for. They never discuss the side effects. In the case of some (medical) residents, I really don't think they know the side effects or feel confident about discussing other medication information. It would help if they would just admit it but that would be too big a blow to the ego. A physician should not have to know all the effects of drugs. Pharmacists are a complement to the medical team but doctors do not utilize them enough. (Sam Ford)

A basis for physicians being more prepared than other professionals lies in the extent of experience according to Joe Cubb:

> A doctor is more qualified to talk about drugs than a pharmacist since the doctor has more experience.

...the doctor knows everything. (Iris Alzmier)

In this study, eight patients want to learn about their medications from the physician. The basis for this preference includes the extensive knowledge base of the physician, his friendship and the lack of accessibility of the pharmacist on the rehabilitation unit. The following comments support this preference:

> The doctors tend to be more readily accessible than the pharmacists on the rehab floor...(and therefore) I have relied on my doctor to answer questions. I tend to ask my doctor questions even when the pharmacist is present because of our... friendship. (Tim Ashley)
>
> I prefer to check with my doctor on questions concerning a new medication since he prescribed the product. (Isaac Walton)
>
> I would like to learn about my drugs from the pharmacist since he is so up-to-date and specifically detailed. On the rehab ward, though, the pharmacist is never around so I have to settle for the nurse or doctor. (Margaret Pierce)

Ease of accessibility and friendliness are cited as the main reasons five patients feel that nurses are helpful in the educational process. These three comments provide more detail for these thoughts:

> Here in the hospital the nurses have been the most helpful to tell me about my medications mainly because they are so accessible and easy to talk with. (Paul Davis)
>
> Here on rehab, the nurses have been most helpful. They use easy language to explain the name of my medication and how it works inside my body, and why this drug is important to me. (Vera Randell)
>
> The nurse is very accessible and provides the drug to the patient. (Margaret Pierce)

Pharmacists, according to this patient population, are the most helpful, best prepared information resources as well as the preferred patient educator. This preference is attributed to a friendly attitude,

solid education base and a sincere concern for the patient. The following comments further establish these points:

> Although the hospital and retail pharmacists have the same amount of knowledge, the rehab...pharmacist... is well-tuned to the medication needs of her patients. Her role...(involves) more time with patient teaching. (Tim Ashley)

> The pharmacist tends to have more knowledge on medications than the doctor. The pharmacist is a source of drug information who provides information and the medication to the patient. I would rather learn about my medications from the pharmacist because she shows a definite interest in helping the patient. She is easy to understand...provides more detail than the doctor...Because of the pharmacist's expertise...I feel more confident in my ability to learn from her. (Rita Panner)

> Before coming into the hospital, I had no reason to see a pharmacist. I feel now with my experience that the pharmacist is most prepared and most helpful to teach me important points about the medications. (Brenda Savage)

> ...the pharmacist is more qualified to teach patients due to his expanded drug education. The pharmacist knows everything about drugs. The doctor knows more specific information about 'me' the patient. Hopefully they can work together to devise the best drug plan for me by sharing...information. When I have to learn about a new medication, I really prefer to learn about it from the pharmacist since he has the best qualifications and education. The pharmacist also has more time than the doctor and can sit and discuss the drug with me. I feel more confident in the information which the pharmacist gives me than the doctor because the pharmacist is aware of the latest data about the drug. (Harris Brinkley)

> The pharmacists on rehab are sparse since they are in the pharmacy. The pharmacy residents and clinical rehab pharmacist tend to dispense more information than drugs which is helpful to the patient...Since the pharmacist tends to provide more direct answers on medications, I would tend to contact the pharmacist about a question.... (Bill Fontana)

Although Isaac Walton prefers to learn about his medications from the physicians, he still places a strong confidence in the pharmacist similar to that of Harris Brinkley and Rita Panner:

> The pharmacist...gives the best report on medications than any other individual in this hospital! We discussed the name, dose, side effects, directions and reviewed it on a special education sheet provided by the pharmacy. It is great! The pharmacy input here gives me great confidence in the profession and how it is affecting me the patient.

The pharmacist gives the patient greater confidence to enhance his education process concerning medications. The greatest educational intervention stressed by nine patients involves the pharmacist's description of the medications. Many patients feel this intervention allows them to hear the "whole drug story". Possible barriers to the drug education process are reflected in the following comments:

> ...the doctors do not want the patient to be fully informed. (Paul Davis)

> What about the patient? I am the one who has to take the drug and would like to know more about these meds! (Rodney Shelka)

This is in sharp contrast to Patty Frazier's comment, "The pharmacist... keeps no information from me."

Penny Fisker summarizes the need for more medication education:

> The doctor is not a very interesting person when it comes to discussing my medications. I usually do not learn that I will be placed on a new medication until the nurse brings it to me! The pharmacist has been extremely helpful to me by telling me that I will be taking another new medication. He...educates me on the proper directions, name of the drug, side effects and possible interactions. I really like to learn these details. I feel more informed on my own health care. The doctor may have the ultimate responsibility of prescribing the drug for the patient but the pharmacist is responsible for the education of that patient to ensure that the patient takes the drug. What good is a fancy drug if the patient decides not to take it? As you can tell, I'd rather learn about my medications from the pharmacist.

Another positive reinforcement of the education process mentioned by six patients includes the pharmacist's medication review summary

sheets. These sheets provide concise reviews which act as a ready-reference for the patient.

Although one of the pharmacist's greatest educational assets includes detailed medication summaries (verbal and written), one of his liabilities includes the lack of accessibility to patients on the rehabilitation unit according to the responses of five patients. Even though most of the patients prefer to learn about their medications from the pharmacist, lack of accessibility may prevent this interaction from occurring several times.

The patients also provide responses concerning the subjects discussed with the pharmacist or the physician, respectively, during the medication education discussion. Table 17 provides a summary of the medication educational points which the patients remember during their discussions with the pharmacist. Table 18 provides an outline of those educational points which are provided by the physician.

Table 17. Medication education by pharmacists (N=21)

Subject	No. Responders*
Side effects	14
Directions	11
Action of drug	10
General use	8
Precautions	6
Drug or food interactions	5
Name of drug	5
Patient's need for drug	4
Refill directions	2
Active ingredients	2

* Responders may provide several choices

During the interview, the patient is given a list of six medications. This list is used to determine which medication(s) is/are

Table 18. Medication education by physicians (N=21)

Subject	No. Responders*
Action of drug	15
Side effects	8
Duration of treatment	5
Directions	4
Name of drug	2
Drug or food interactions	1
Dosage	1

* Responders may provide several choices

unfamiliar to the patient in order to base further educational questions of interest to the patient. The following tables (Tables 19, 20, 21) summarize these data.

Once the patient determines which drug(s) he is unfamiliar with, he provides questions to the interviewer to improve his overall knowledge base of that drug. Table 20 provides a summary of these types of

Table 19. Medication-use test (N=23)

Medication	No. Correct Uses	No. Wrong Uses	No. Unknown Uses
Aspirin	22	0	1
Milk of magnesia	18	3	2
Alka-Seltzer	20	0	2
Zantac	1	0	20
Colace	15	0	7
Dibenzyline	2	1	19

Key: Correct Uses

Aspirin:	pain relief
Alka-Seltzer:	upset stomach, colds, headache relief
Colace:	stool softener
Dibenzyline:	high blood pressure, bladder control
Milk of magnesia:	laxative, antacid
Zantac:	anti-ulcer medication

Table 20: Patient-preferred medication information (N=23)

Subject	No. Responders*
Side effects	20
Name of drug	15
correct spelling	3
correct pronunciation	7
Patient's need for drug	14
Directions for use	12
Action of drug	10
Duration of treatment	6
Addiction potential	5
General use	5
Drug or food interactions	3
Experimental status of drug	1
Precautions	1
Dosage	1
Active ingredients	1
Cost	1
Accumulation of drug in body	1
Brand name versus generic differences	1

* Responders may provide several choices

Table 21. Significance of knowing drug names (N=13)

Reason	No. Responders
Fewer refill errors	6
Fewer adverse/allergic reactions	4
Communication advantage	3

educational details which patients prefer during medication discussions. Table 21 provides insight to the importance of medication names according to these patients' perceptions.

So far the data has demonstrated the feelings, thoughts, and beliefs of patient concerning their health, their own methods of self-treatment when health is not optimal, and their interactions with physicians and pharmacists in the professional sector. The next section analyzes how these attitudes and beliefs, after being exposed to the

health care system, influence future ventures into that health care system.

Physician Visits

During the interviews, the patients provide input concerning the nature of visits to the physician before and after the accident or onset of illness. The objective of this input provides insight into any increased health awareness after the accident or illness. The patients are divided according to the date of injury or the onset of illness. A "recent injury" is defined as occurring within the last 12 months and an "old injury" is defined as being over 12 months old. The data are summarized in Table 22.

Table 22. Annual physician visits by recent injury patients prior to injury

Visits per Year	No. Patients	Nature of Visits
2-12	6	medication updates
2	1	seasonal allergies
1	7	physical exams
0-1	4	matter of life or death

These patients with recent injuries or illnesses did not have ample time to demonstrate a comparison of medical exams before and after the injury or illness. These patients could only comment on those visits occurring before the injury or illness. Referring to Table 22, the largest group (7 responders) represents those patients who receive annual physical exams. In this group, 25% of exams include dental exams, 25% include physical exams to fulfill an occupational licensing requirement while 50% include physical exams having no external influences (such as a job requirement). This 50% response figure

represents a more consistent group of patients who are otherwise healthy seeking an "approval" of their health status.

The following remarks provide more detail to summarize these figures:

> Being a trucker, I have to get a physical exam once every year. Before I started driving truck, I was lucky if I saw the doctor once every two years. (Peter Franklin)

> Because of my EMT (Emergency Medical Technician) work required me to be in perfect physical condition, I would visit my doctor once a year for a physical exam. I was probably more willing to go to the doctor because one of the requirements for EMT license renewal involves a yearly checkup. (Sam Ford)

These two examples portray instances where patients are "forced" to acquire good health habits to maintain their occupational status.

The following statement summarizes the feelings of those patients who make annual checkups a consistent component of their overall health plan. Joe Cubb feels it is important to have a physical exam even if no complaints are voiced by the patient:

> I usually see my family physician for a yearly physical exam...It is important to visit your physician at least once yearly so he can tell you the actual condition of your body. Some diseases may arise without any symptoms.

The second largest group (6 responders) consists of individuals who see the family physician several times yearly. The basis for these visits primarily involves monitoring disease states and medication records. In this group, 66% of patients are over the age of 50 years. The following remarks are apposite here:

> Before my stroke, I would go to the doctor's clinic once every two months for small physical exams and to check my heart medications. (Iris Alzmier)

> I usually visit my physician 7-8 times per year for blood pressure checks and blood glucose levels with follow-ups on my medications for the high blood pressure and diabetes. (Steven Walker)

> I usually see my doctor on a frequent basis: once a year for a physical exam and once every four months to check my blood pressure and my medications. (Venice Fitzgerald)

Some patients admit that seeing a physician for a physical exam, prescription, or whatever, was a very infrequent event. In Table 22, four patients state they would only contact a physician under very severe circumstances. The following observations are appropriate:

> Before my accident, I had not visited my family physician for five years. I usually only visit my doctor when I have symptoms that I cannot tolerate. I have always felt healthy until the accident. (Thomas Tomkins)

> Since I had this stroke, I have felt negligent about taking care of my health in the past. In the past four months, I have seen the doctor five times! During that time, I suffered from a pulmonary embolism, a perforated ulcer, a dislocated disc in my back, and now the stroke. (Isaac Walton)

> Visiting the doctor is not a common occurrence in my family since we are infrequently sick. My wife and I or my children may see the doctor once every other year to get a cold prescription. (Bill Fontana)

> We are not a health-oriented family. Before my accident, I would only visit a doctor for severe symptoms such as stitches or dying. Now I see my doc five times per year. (Kenny Greely)

The final group includes one patient who visits the physician for seasonal conditions such as allergies or asthma. The following statement is a fitting observation:

> I see my doctor quite regularly for my allergies. I receive allergy shots twice a year. Before I developed allergies to bee pollen and dust, I would only visit the doctor once every ten years. (Brenda Savage)

Patients with injuries or illnesses beyond 12 months duration (old injuries/illnesses) also provide input about annual physical checkups and visits to the physician. Since these patients have older injuries or illnesses, they are more likely to be aware of their year-long health plans. Table 23 depicts this summary.

Table 23. Annual physician visits by older injury patients before and after injury

Patient	DOI	Before	After	Category 1	Category 2
Pierce	1955	0	Several		X
Paris	1970	0	Several		X
Brinkley	1964	0-1	4	X	
Frazier	1972	0	2-3	X	
Brisbo	1983	6	2-3	X	
Ashley	1983	1	4	X	

Key:

DOI: Date of injury/illness
0: No recollection of visits
Before: Number of visits per year before injury/illness
After: Number of visits per year after injury/illness
Category 1: Scheduled clinic visits
Category 2: Visits in excess of scheduled clinic visits

From Table 23 two definite categories emerge. Category 1 involves routinely scheduled clinic visits. The University Hospital Rehabilitation Outpatient Clinic usually schedules the patient to return to the clinic 4-6 weeks after his first discharge. Provided the patient has no new medical problems, he returns to the care of his family physician. Routine clinic visits are scheduled every six months provided no other problems occur in the meantime. Category 2 includes visits in excess of the routine ones. Paris and Pierce falls into the latter group while the remaining patients fall into the first category. According to this table, Paris and Pierce have several clinic visits

annually. This is due to recurring chronic problems of constipation, pressure sores and persistent meningiomas.

Overall, the data from Table 23 show a definite pattern of an increased frequency of clinic visits. One may assume that although Pierce, Paris, and Frazier do not recollect their prior clinic-physician visits, the former patterns were probably not as regular as at the present time.

> Since my injury occurred such a long time ago, I cannot really remember how often I saw my family doctor. I visit my rehab doctor 2-3 times per year. (Patty Frazier)

> As you probably know, my health history is very involved! Before the age of 15 years (prior to 1955), I would only see my doctor for childhood illnesses such as chicken pox or colds. Over the years though, I have had to see my various doctors several times each year. (Margaret Pierce)

The remaining four patients who have maintained regular clinic visits also show a trend for more consistent patterns at the present time. Mr. Brisbo is the patient who states more frequent clinic visits prior to his illness. However he is not sure if this number is very accurate. The following excerpts demonstrate this pattern.

> I did not have much association with doctors before my accident either. The only conditions that would force me to see the doctor were seasonal asthma and anytime I felt plain sick! That all changed though after the accident. I see my rehab doctor and my regular doctor each once every six months. (Harris Brinkley)

> Before I became ill, I usually visited my family doctor once every six weeks to check my blood pressure and evaluate my blood pressure medications. (Jack Brisbo)

> Before my accident, I saw my family physician annually for a physical exam. Now I see my rehab doctor four scheduled times per year provided no other symptoms develop in the meantime. (Tim Ashley)

This patient population demonstrates an overall increased health care awareness especially in the case of those patients with older injuries or illnesses. Another consideration of this elevated awareness, besides more frequent clinic visits, involves the patients' exposures to the vast amount of health information heard "over the wires" and in personal conversations. The next section examines the acceptance of this health information.

"Common Sense" Sources of Health Information

Today health information is widely disseminated by television, radio, newspapers, magazines and word of mouth "on the street". So much information is available to the serious and casual observer alike. One reason for this vast amount of information is due to the highly advanced technological state of medicine today. This surge of information has also sparked curious minds to increase health care awareness. A reasonable question to present is "How does the lay person gather, organize and consider this health information?". Sam Ford introduces this idea in his own words:

> Medicine has changed a lot from the old days. People used to go to their general practitioner for advice and care. They would follow that advice with no questions asked. Things have changed because now the patients are starting to ask questions. One situation which may have triggered this change is the knife-happy attitudes of the surgeons. For the patient, surgery is not a pleasant experience. Some surgeries are performed when they are really not necessary. Second opinions have now become a common activity. A patient wants to have a physician which he can trust to meet and satisfy the needs of his body.

Margaret Pierce also shares her view:

> In the old days, the nurse would bring the drug and the patient took it with no questions asked. Today the patient has the right to refuse medications. I

think that the changes in health care have been more positive to involve the patient.

Analysis of the data dealing with the patients' ability to accept or disregard health information is provided in Table 24.

Table 24. Acceptance of health information (N=17)

Category		No. Responders
1.	Those who question health information and seek opinions	15
2.	Those who accept health information at face value	1
3.	Those who ignore health information	1

The majority of patients admit that questioning health information is an important duty. Some note this act as a means to broaden knowledge horizons, to satisfy curiosities, and to open doors of the unknown. Other similar thoughts focus on this theme:

> Health is not an exact science. One doctor's fact may be another doctor's opinion. The outlet of a second opinion is necessary to satisfy curiosities. (Ali Bliss)

> Second opinions...improve communication between people to bring out views not seen before. (Jack Brisbo)

> If a patient is not satisfied with a diagnosis or treatment, he has the right to two, three, four or more opinions. The consensus of the opinion will give the patient more confidence in his diagnosis or treatment. (Peter Franklin)

> Questioning health information is important because it allows a person to decide on the pros and cons of a topic to better understand the information. Obtaining a second opinion is a form of such a question. It gives the patient more confidence in the doctors and the decision when that decision is unanimous. One doctor wanted to cut my toes off because of circulation problems. I asked another doctor...I still have my toes today. (Patty Frazier)

Harris Brinkley chooses to accept health information at face value until a later date. He puts it this way:

> When a person reads about health news, he has to be careful since magazines...stretch the truth. I usually accept it at face value until I hear or see the topic mentioned in the national news media.

Although Harris Brinkley assumes a more passive nature by "letting the health information come to him", he still believes in the significance of questioning health information. He summarizes it in this way:

> Second opinions are an important option of health care. I like to see doctors share medical information and state similar conclusions. This gives me more confidence in my diagnosis.

Anna Paris, however, has conflicting thoughts. She chooses to ignore much of the health information around her. She relies on only one source to keep her informed on the specific health information which is only pertinent to her own needs. Anna Paris' comment follows:

> I hear about many new health ideas from the media but I do not pay attention to it. I would rather ask questions to my doctor since I know his answers are trustworthy.

Since various means exist to learn about health care, each patient reveals how he has learned about general health information in the past. Each patient discusses how he would learn about a disease state if he knew that he had that disease. Table 25 provides a summary of data which illustrate differences in health information sources.

Table 25 demonstrates that in this patient population, most patients learn about general health topics mainly through television, magazines, physicians, libraries, disease foundations, and the spinal

cord injury education series. This wide array of informational sources provides a means to satisfy diverse interests in health care topics.

Table 25. Sources of responses for general and personal health information (N=25)

Source	General*	Personal*
Television		
Health shows	14	0
Cable health shows	7	0
Magazine	16	0
Family physician	14	20
Public library	9	0
Disease foundation	5	1
Rehabilitation spinal cord injury education series	5	0
Relative/friend in health occupations	4	0
Medical dictionary	3	2
Health encyclopedia	3	1
School health course	3	0
Medical library	2	1
General encyclopedia	2	1
First aid book	1	0
Pocket-size disease book	1	0
Rehabilitation manual	1	0
Center for Disease Control	1	1

* The number of patients who use certain information sources for general health questions are recorded under the "general" column. The number of patients who use certain information sources to answer personal health questions are recorded under the "personal" column. The patients may also provide several choices for general and personal sources.

When a person learns that he has been diagnosed with a disease or feels that he may have a disease after experiencing various symptoms, a likely recourse to satisfy curiosities of "Will I die?", "Is it curable?", is to seek other sources of information. Twenty patients admit they would seek a physician for information. Some reasons for this decision are given by the patients:

> If I knew that I had this disease, I would visit my family doctor since he has more expertise than I do. (Paul Davis)
>
> If I ever had a health question that involves me personally, I would...talk to my doctor who would have to diagnose the problem anyway. (Rodney Shelka)
>
> If I had the disease personally, I would want to work closely with my doctor to determine if I needed extra tests or hospitalization. (Tim Ashley)
>
> If I had the disease in question, I would want more expert advice from my doctor who knows its proper treatment. He could then refer me to other sources of information. (Patty Frazier)

Television is the most frequent source for health information according to 21 patients. Television provides a means of passive learning and can be an important communications center for the completely or partially immobilized person. Table 26 describes the various programs viewed by these patients:

Table 26. Television health topic preferences (N=25)

Program Topic	No. Responders*
Diet	4
Exercise	4
Public Broadcasting System	
"The Brain"	3
"Lifeline"	3
"The Body"	1
"Sexuality"	1
"Spinal Cord Injuries"	1
"Twenty-Minute Work Out"	2
"Body Human" (for video cassette recorder)	2
Near death experiences	1
Diabetes care	1
Home Box Office	
Sexuality topics	1
Health specials	1
High blood pressure control	1
NOVA health shows	1
Lifestyle-related shows	1
"Sixty Minutes"	1

* Responders may provide several choices

Magazines are the second most frequent source for obtaining health information according to 16 patients in this study. Table 27 provides a listing of the various magazine titles read by these patients.

Table 27. Magazines as health information sources (N=25)

Title	No. Responders*
Time	4
Reader's Digest	4
National Geographic	3
Glamour	2
Newsweek	2
People	2
Sports	2
Sports Illustrated	2
Architect's Digest	1
Boating	1
Field and Stream	1
Journal of Emergency Medicine	1
Health Today	1
Ladies Home Journal	1
Life	1
Mademoiselle	1
McCalls	1
Mother Earth	1
Outdoor Life	1
Sailing	1
Sunset	1
Miscellaneous	
Clinic "waiting room magazines"	1
Cooking magazines	1
LDS magazines**	1

* Responders may provide several choices

** LDS: Church of Jesus Christ of Latter-day Saints

The reasons for choosing these magazines vary as much as the magazines titles. Some of the patients provide further insights into their selections by the following remarks:

> I read magazines which are related to my work such as the Journal of Emergency Medicine which has numerous articles on CPR (cardiopulmonary resuscitation) and hypothermia. (Sam Ford)

> The only magazines which really deal with health problems are those found in the doctor's waiting room. (Harris Brinkley)
>
> I also like to read Health Today which has interesting ideas on how to make the diet more healthy...new uses for honey, bee pollen, aloe and papaya juice. (Margaret Pierce)
>
> Some magazines such as National Geographic, Time, Sports, and Sunset have various health articles on new medication research (Time), recipes (Sunset), and the health habits of nomadic tribes (National Geographic). (Graham O'Reilly)
>
> The magazines which I read include Field and Stream, Outdoor Life...Any health articles usually stress the importance of being in good condition especially during the hunting season to track deer. The health tips are usually very general without detail. (Peter Franklin)
>
> National Geographic deals occasionally with environmental health issues. Architect's Digest has articles on the environmental structure of buildings in relationship to promoting good health. The articles discuss proper remodeling features for wheelchairs...proper ramp angles. (Isaac Walton)
>
> Reading about health in the Reader's Digest can be interesting. The articles are valid because my mom reads this digest a lot. (Brenda Savage)
>
> Many of the magazines which I buy do have health-related articles in them. Healthy recipes and diet plans are found in McCalls, Ladies Home Journal, Reader's Digest and National Geographic....At least the ladies' magazines have authors who are consulting doctors or medical experts. (Venice Fitzgerald)

Since the titles and subject contents of these magazines are so diversified, Table 28 gives a closer insight into the actual health topics of interest.

Two patients also share their thoughts on health information areas where incresed awareness and expansion of research is necessary. One such patient, Anna Paris, who usually ignores all other health

Table 28. Magazine health topic preferences (N=24)

Topic	No. Responders*
Diet	15
Exercise	13
Emotional health	11
Good health habits	7
Symptoms	7
Anatomy/physiology	6
Cancer	4
Personal hygiene	3
Stress/coping	3
New research discoveries	3
Life saving techniques	2
Rest	2
Vitamins	1
Wheelchair topics	1
Physical therapy	1
Quadriplegia	1
Psychology	1
First aid	1
Hypothermia	1
Catheter care	1
Thoracic surgery	1
Environmental architecture	1

* Responders may provide several choices

information which does not involve her personally, sheds light on one area of immediate interest where she is involved daily:

> I feel that I have received my fair share of education on taking care of myself. I do not think the public appreciates the social problems which wheelchair folks face today. The public does not know how we have to live. Handicapped people are 'people' and should not be hidden away. I am irritated when buildings are not equipped for wheelchairs. The buildings with wheelchair entrances are not very accessible due to doors that open in and not out.

On the other hand, Graham O'Reilly, a man who is stricken with terminal cancer and feels that each day is his last day of life, shows concern over research which he will probably never live to see. Graham O'Reilly puts it this way:

> Since I have cancer, I want to know about any new research on diet in the cancer patient. It is important to keep an open mind since all the answers are not in yet. Consider all the research which has been done to link smoking with lung cancer.

When the patients discuss the informational sources they use to satisfy health care curiosities, many also describe the "medical library" at home. Many patients use this source to answer health questions. Table 29 gives a list of these personal library references:

Table 29. Personal library health references (N=25)

Reference	No. Responders*
Medical encyclopedia	7
Emergency medical books	3
General encyclopedia	3
Medical dictionary	3
Nursing books	3
Physicians Desk Reference	3
University of Utah Hospital rehabilitation manual	2
Anatomy books	1
First aid books	1
General disease books	1
Merck Index	1
National Formulary	1
United States Pharmacopoeia	1

* Responders may provide several choices

Besides providing their thoughts about traditional books and magazines of the lay press as health information sources and references, the patients also admit their views and preferences concerning the yellow tabloids which appear weekly at "the grocery check-out stands", newsstands and magazine shops. Careful examination of the data reveals two distinct viewpoints: 1) Tabloids lack credible information, and 2) public awareness of these tabloids is important.

Considering the first category, "Tabloids lack credible information", the patients state very definite views. Of the 23 patients who comment on the tabloids, all state they have heard of these papers. In this group, 19 patients state they are either skeptical about such papers or think these papers are "trash". One responder feels the papers deserve some merit while three patients admit they have never read an article in these papers to draw any opinions.

For those responders who are skeptical about the truthful nature of these tabloids, the following comments bear insight into this credibility gap:

> Newspapers like The Star are trash. I have scanned a few of the articles and found them to be highly sensational and a product of poor journalism. The authors have no credibility to back their articles which lack any scientific basis. (Bill Fontana)

> The Enquirer is a source of health information. The articles are full of crap. I tried one of their new headache remedies...which did not work. I need to hear this information from reputable people like doctors before I will believe these new remedies. (Kenny Greely)

> Newspapers like The Enquirer are a waste of money. The Enquirer stated that laetrile was a cancer-curing drug. It is really no better than a placebo. I only tend to believe well documented studies in well known journals such as Journal of Emergency Medicine, American Health Journal, and Medicine...I am more able to decide which health information is hocus-pocus and which is valid material. (Sam Ford)

> My opinion of The Enquirer is not very high. I have only read a few of the articles which I found to have twisted themes and sensational facts if you dare call them facts...If the discoveries were so vital, why have they not been broadcast in the national news media? I need a second source to verify these articles...If I want to know facts about law, I will visit a lawyer. If I want to know facts concerning medicine, I will ask a doctor...not a yellow newspaper. (Rodney Shelka)

> Some people might consider The Enquirer a good source of medical information. I consider it pure trash.

> These papers are strictly for entertainment...If their discoveries were true, the medical journals and national news media would be spreading the good news. Cures for cancer and arthritis are big business and big news. (Paul Davis)

> ...The Enquirer...far-fetched without an ounce of truth...I would be more likely to believe the articles if doctors or nurses or other medical professionals had written them...A person has to be aware of reputable sources. (Vera Randell)

Although Peter Franklin and Jack Brisbo do not fully support the questionable health articles in the tabloids, they tend to have more open attitudes. Consider the thoughts of Peter Franklin:

> While waiting in the grocery store line, I have browsed through a few Enquirer articles. I think it is important to 'at least be aware' of the information which other people are reading even if the information is a sheer conversation piece. If the articles are truthful...the same information should be found in other leading news magazines...This would give more credibility to the articles.

Jack Brisbo shares a somewhat similar viewpoint:

> Yes, I have sneaked a peak at one of those Enquirer-type newspapers! I think it is important to at least 'consider the health information offered' in these newspapers which have a poor reputation, if any. One never knows if something thought to be ludicrous may turn out to be a milestone for the terminally ill. I do not accept the information at face value but it is important to know what other people are thinking about.

Tim Ashley, on the other hand, tends to support an even more open attitude concerning the tabloid papers:

> The Enquirer is an interesting newspaper to read. A person should approach all medical discoveries with an open mind. The different discoveries are bound to help someone...All the health information which we hear nowadays has pros and cons which must be balanced and weighed to determine benefits and risks.

A controversy of interest appears in this interview section. The question or controversy concerns "When is health information credible?".

Harris Brinkley among other patients feels that he can accept "truth" once information is broadcast by the news media. His statement follows:

> ...The Enquirer tends to stretch the truth. I usually accept it at face value until I hear or see the topic mentioned in the national news media.

Isaac Walton, however, shares an educational counterattack against this idea:

> To be honest I have only looked at The Enquirer once in the airport. I really don't seek those papers out! This question is interesting because the TV news revealed some sensational points of interest. A physician in California has had success in treating various back problems by injecting hydrocortisone and morphine directly into the spine. This affected me personally since I have such a bad back. The medical profession according to my son (who is a surgeon) states this treatment has no valid published statistics. This is a sensational news item which bears no credible use.
>
> This story is interesting because it was broadcast nationally by the TV media. I naturally thought it was a genuine treatment...this demonstrates that The Enquirer is not the only sensational news piece. For this very reason, the questioning of health information becomes important.

Graham O'Reilly supplies the final thought on this controversy:

> A person should not accept this (The Enquirer) information at face value, especially if he is unsure of the credibility of the article...the person...(has to) make a more quality decision for himself.

Tables 30 and 31 compile various summaries of data which demonstrate the extent these patients want to familiarize themselves with the tabloids.

Table 30. Patients' familiarity of tabloid titles (N=23)

Title	No. Responders*
The National Enquirer	22
The Globe	2
The Star	1

*Responders may provide several choices

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Table 31. Extent of satisfying curiosities involving tabloids (N=23)

		No. Responders
Ever browsed?		
Yes	(airport)	1
	(grocery store)	1
	(relative/friend's copy)	3
No		0
Purchases made?		
Yes		0
No		21

Note: These data are derived from patients who provided curiosity satisfaction information without being asked by the interviewer.

Although The National Enquirer is the most well known tabloid in this patient population, no purchases were ever made, but patients admit to having browsed through the papers.

Some of the actual tabloid topics include headache remedies, copper bracelets for arthritic symptoms, laetrile and other anti-cancer remedies and various spinal cord injury "cures" which are discussed by the patients.

How Safe Are Medications?

Once the patient has questioned the health information presented to him (whether this is general information, a personal diagnosis or a prescription medication), he can analyze the pros and cons of this information. One such consideration involves the safety of prescription and nonprescription medications. The next section examines both the

patient's perspective on the safety of these products and his perspective on the use of these products to treat symptoms.

Today the safety of medications has become a public concern after the occurrence of several medication adulteration incidents such as the Tylenol incident. This population of patients comments on the current safety status of over-the-counter medications in the United States. Analysis of the data shows four separate categories of consideration. These medications are considered safe when:

1. extensive testing procedures are performed,
2. presence of tamper-proof seals are placed, and
3. the physician prescribes such medications.

The patients provide responses which contain combinations of these categories. Some apposite views follow:

> Over-the-counter medications are safe to buy because of the extensive FDA testing requirements before marketing. This ensures consumer safety. All medications now have to have safety packaging too. The products are safe generally but may not be safe for the patient who is allergic to the drug or... takes many other medications. (Venice Fitzgerald)

> Medications which are available to the public are safe to use provided the consumer does not overuse or overdose on the product. This situation becomes the consumer's fault and not the drug company which provides adequate directions on the label. (Isaac Walton)

> If the medication has not been tampered with it may still be unsafe to take. If a person cuts his toe, aspirin may make him bleed to death. (Patty Frazier)

> Over-the-counter medications are safe to buy but the consumer tends to buy these products blindly. If a person has high blood pressure and takes an OTC drug of his choosing, he may develop congested heart failure. (Harris Brinkley)

> I think it is important to watch the packages which drugs come in...I am also very much aware of the labels which list ingredients and chemicals. I

> learned this from a Seventh Day Adventist friend... Medications are safe to buy on the market provided the consumer has the recommendations of the doctor or pharmacist. Benign drugs such as Vaseline (petroleum jelly) are safe but not in the hands of my children. (Margaret Pierce)
>
> Aspirin, Tylenol, and vitamins are only safe for a person to use when the doctor writes for them. (Iris Alzmier)

Table 32 provides a listing of the various sources of influence upon the consumer (the patient) before an over-the-counter (OTC) product is purchased according to this patient population.

Table 32. Influences on OTC medication purchases (N=23)

Source	No. Responders*
Television ads	11
Family tradition	11
Pharmacist	5
Newspaper ads	3
Magazine ads	3
Physician	2
"Trial and error"	2
Radio ads	2
Friends	2
Consumer reports	1
Church	1

* Responders may provide several choices

Some patients provide additional insight on how these influential sources affect the actual purchase of an over-the-counter medication. These sources may provide beneficial as well as confusing information. The following remarks are appropriate:

> If I should have another arthritis attack when my Motrin prescription has expired, I would definitely buy Advil. It is the same compound as Motrin but available in a milder strength. The Advil ads on TV have been very influential by mentioning the name 'Motrin'. I know by experience that Motrin works! (Jack Brisbo)

> Too many hoax drugs are on the market for arthritis and may be harmful or useless depending on the condition and other drugs a person may be taking. Some TV ads leave me quite confused so I like to okay my drugs with the doctor. (Venice Fitzgerald)

> People have to be careful when they buy these new over-the-counter drugs. The ads on TV can be misleading sometimes. Nuprin, which is like Motrin, is supposed to be as strong as two aspirin tablets. (Paul Davis)

Besides being safety-conscious about over-the-counter medications, these patients also think about other considerations prior to the use of drug products such as side effects. Six categories, which are found in Table 33, concerning these considerations of drug use are provided by this patient population.

Table 33. Considerations prior to drug use (N=23)

Category	No. Responders*
Demonstration of need	14
Side effects	6
Active ingredients	4
Physician's choice	4
Interpretation of symptoms	2
Cost of product	1

* Responders may provide several choices

Considering the various definitions used to describe the term "medication", 14 patients admit that a genuine need must exist to substantiate the use of a medication. The following remarks are appropriate:

> Medications should only be used when a need exists. A medication should not be used just to try it. If I had the need, such as a headache, and I knew the drug came from a reputable company, I would probably use it. (Steven Walker)

> Whenever a new over-the-counter medication comes out, I would buy it only if I thought it would help

> me. My family has used Tylenol for years and we would buy Advil only if the need arose and the Tylenol no longer worked. (Joe Cubb)
>
> When new medications come on the market, there is a tendency to try new products. I may try the product if I had a definite need for it. (Rodney Shelka)

The side effect profile of a medication can also be a deciding factor if that product will be a consumer purchase. Peter Franklin sums it up this way:

> Whenever my regular OTC drugs do not relieve my nagging cold, I would be tempted to try a new OTC cold product...that...does not cause drowsiness. As a trucker, I cannot afford to be drowsy.

For other patients, such as Iris Alzmier, less common adverse effects of a medication may pose a constant threat to the user:

> My body acts adversely to many medications. I took aspirin once for my arthritis by my doctor's order. I became very disoriented, crazy, and did not know where I was!

Four patients state the "product" is not as important as the active ingredients of that product. Harris Brinkley stated in a previous section, "...the consumer tends to buy these products 'blindly'.". Due to the lack of product information and consumer understanding, over-the-counter medications may be purchased by the consumer for the "name only" rather than the active ingredients. Many similar views are shared by the following patients:

> Buying a new medication at the drugstore for the sake of buying is not a good policy. When I had an impacted knee, the physician gave me Motrin...When Advil came on the market, I bought it because it contained the same active ingredient as Motrin, ibuprofen, in a smaller strength. Advil is a new product but not a new compound. Ibuprofen works! People tend to get caught in this trap when they buy a 'new' medication. (Sam Ford)
>
> Sometimes fevers can be broken faster with Tylenol. (Tim Ashley)

> If I should have another arthritis attack when my Motrin prescription has expired, I would definitely buy Advil. It is the same compound as Motrin.... (Jack Brisbo)

Some people may feel their drug dosage regimens are too complex without adding even more drugs. Others feel more secure having the physician's reassurance:

> I have enough medications to take without adding more. I will try new products only if my doctor tells me to do so. (Anna Paris)

> I usually do not buy over-the-counter drugs without talking to my doctor first. (Venice Fitzgerald)

Two patients in this population present an interesting dilemma: If a person feels that he truly does have a symptom which requires treatment, how does that person know if that symptom is genuine? Brenda Savage presents her comment:

> A person has to be careful not to be caught in the cycle that a pill exists for every ache and pain. If a person thinks a pill will work, it probably will. Psychological input with medications is powerful! When I had migraine headaches, I would cycle Coke and aspirin by the cases. My doctor said that I had created a mask allergy to Coke and aspirin. I was actually creating my own headaches. My headaches were psychogenic...I do not believe in shoveling in the drugs for every ache and pain.

Margaret Pierce also admits that the psychological will of a person plays a role in drug therapy:

> I know that aspirin is aspirin but I always buy the Bayer brand. Some of my headaches are probably cured by psychogenics...thinking that it just has to be Bayer to work!

The cost of a medication can also be a deciding factor before the purchase, especially when two products may be identical in therapeutic action and dosage administration times. Venice Fitzgerald offers her comment on this topic:

> I like to ask the pharmacist how the new product compares with the older products. Sometimes no difference exists except cost.

Lay Persons in the Role of Consultants

After considering the influential effects of health care professionals, the news media, and the lay press on the use of over-the-counter medications, one other source of potential influence upon such purchases remains untapped: that of other lay persons. When these data are analyzed, four categories as seen in Table 34 develop from this patient population:

Table 34. Lay people influence in OTC medication decisions (N=24)

Category	No. Responders*
Recommend/consider use	21
Share/use	5
Not share/not use	21
Not recommend/not consider use	3

* Responders may provide several choices

The analysis of these data reveals that those patients who recommend or consider the use of an over-the-counter medication are the same patients who do not share their OTC drug supply or use the same supply of another person. Only five of these same patients state they would share their supply with another person if that person was in "dire need". Three patients who do not consider the recommendations of lay people or do not use another person's OTC drug supply gave comments based on the lack of trust in the other party. The following comments verify these themes:

> I do not believe in passing OTC or prescription drugs between people. I may tell a friend what

> effect a certain product had on my symptoms but I would leave the decision up to my friend whether to buy it or not. (Tim Ashley)
>
> If a good friend told me a drug worked wonders for his specific symptoms, I may consider trying it after deciding that my old standby was not helpful. If his drug was a prescription product, I would not even consider using it since it was prescribed especially for his needs. If my friend was in dire need of a medication...I would offer him one of my OTC remedies if they were handy; otherwise he would have to buy his own. (Rodney Shelka)

For those patients who do not consider lay recommendations the following comments are apposite:

> I only trust the medications the doctor prescribes and would not even consider those used by other people. (Anna Paris)
>
> If my friend offered me a medication for my cold, I would be hesitant to try it since I have strange friends who do not always tell the truth. (Kenny Greely)

One possible reason for the unanimous decision not to share prescription drugs according to this patient population may involve a so-called "sanctity" of the written prescription ... "those potent type medications". Consider the following typical remarks:

> If I think I may need a more potent medication, I will just call my physician. (Sam Ford)
>
> I would never offer my prescription drug to others or accept their prescription drugs. I might be allergic to their brand. My parents have drilled me since I was a child to never take or use other people's prescriptions. Over-the-counter drugs are more 'safe' for the general public. (Ali Bliss)
>
> My friends may use my OTC meds if they demonstrate a genuine need. I would never let them use my prescription drugs. Prescription drugs are a personal thing like a contract between the patient and doctor. My folks have always told me to never use other people's prescription medications. (Penny Fisker)

Are Symptoms Ever the Same?

Once again the concept of "genuine need" surfaces: The genuine need for the use of a medication; the symptomatology which generates the need to diminish or abolish these discomforts. As discussed in a preceding section, the actual interpretation of symptoms by the patient generates the need to use drugs. This interpretation may be "genuine" in some cases but may be misperceived in other cases. This discussion is important because symptomatology can form a basis for entry into the health care system. The interpretation of symptoms by the afflicted person may affect the final outcomes of drug therapy. The following comments stress these points: Margaret Pierce, at the very young age of 16 years, was extremely fearful of experiencing any symptoms due to a lack of understanding, a fear of the known and a fear of the unknown. Her story follows:

> If I would have been more informed at an early age, I would have sought help from my mother and doctor. I had difficulties in urination; I would trip and stumble. My headaches were so terrible and yet I hid all these symptoms from my mother and I even lost weight. One day after swimming in the pool, I realized that I could not walk. I felt sick...wanted to just stay in bed. I still did not tell my mother how I felt. There had been a polio outbreak in the ward where my mother (nurses's aid) worked but my symptoms did not match the other patients according to my mom. The doctor took some serum from my spine and said the picture 'did not quite fit' that of polio but that it probably was polio. A spinal tumor was also diagnosed shortly after that time.

Some of the patients in this study began to ask themselves the following questions: Once the presence of "symptoms" is acknowledged by the afflicted person, are future similar symptoms ever in the same plane of severity? Can these symptoms ever be cross-interpreted by lay

persons to other persons with similar symptoms? The following comments develop more detail for these questions:

> People tend to think that everyone experiences the same types of symptoms. Since no two bodies are identical in physical functions, medications tend to act differently in each body. A medication may work for one person and not for the other. (Harris Brinkley)

> It is hard for me to speak on the generalities on the treatments of symptoms...It (the symptom) depends on the person, the situation, the degree of the symptoms versus the person's tolerance level. A person may really never have the same symptom twice due to these considerations. (Bill Fontana)

> Even though my symptoms may seem to be similar (to my friend's condition), the underlying condition may be very different. (Isaac Walton)

Margaret Pierce again comments,

> Even though symptoms may seem to be identical, two people may have totally different problems. I am afraid to use unfamiliar drugs. Years ago, I was given a drug after surgery...My spirit left my body and stood at my bedside looking at me.

Rodney Shelka questions, "At what point does a person who may have established symptoms use that condition as a crutch for other intentions?"

> Health is a personal interpretation...for the tolerance of symptoms...Illness can be psychogenic. My mom describes her pain as 'excruciating' or says that she is on her 'deathbed'. I find it hard to know when the pain is genuine. My folks mentally propagate their illnesses. They do not understand that aches and pains can be just aches and pains and nothing more.

Bill Fontana comments on how beliefs which are generated from previous experiences with symptoms and drugs can actually inhibit drug action in his "gate theory". Bill Fontana's summary follows:

> The person may have had a bad experience with drugs before and may associate this experience to be true

with all drugs. Health is a concept of mind over matter. If the mind has a bad attitude concerning the drug, it may act as a 'gate' to prevent the drug from actually performing its action in the body. The beliefs which a patient holds are an important aspect of health care to improve communication between the health care team and patient. Certain beliefs held by the patient may actually prevent or enhance the drug's action.

Table 35 summarizes the most commonly purchased over-the-counter medications which this patient population uses frequently.

Table 35. Commonly purchased OTC medications (N=24)

Medication	No. Responders*
Aspirin (generic)	11
Tylenol	5
Advil	4
Contac	4
Anacin	3
Antihistamines (generic)	3
Multiple vitamins (generic)	3
Antacids (generic)	2
Actifed	2
Pepto Bismol	2
Rolaids	2
Throat lozenges (generic)	2
Vicks VapoRub	2
Alka-Seltzer	1
Coricidin cold tablets	1
Cough syrup (generic)	1
Dristan tablets	1
Multiple vitamins (generic)	1
Robitussin cough liquid	1
Sine-Off	1
Sucrets	1
Tums	1
Vicks Formula 44 Cough mixture	1
Visine eye drops	1

* Responders may provide several choices

The top four most commonly purchased nonprescription medications for this patient population include generic aspirin, Tylenol, Advil, and Contac.

Table 36 shows the most common places where these products are purchased by this patient population.

Table 36. Places of OTC medication purchases (N=17)

Store	No. Responders
Supermarket-pharmacy	10
Supermarket (no pharmacy)	4
Department store pharmacy	2
Independent "corner drugstore"	1

This research project has focused on the identification of patient beliefs concerning health and medications. The main purpose has been to explore the vicissitudes of a rehabilitation patient population's beliefs and examine any basic belief patterns inherent to this patient population. Considerable evidence suggests that the patient is very much a participant in his own illness rather than being an object or recipient of health. Indeed any clinical intervention must seriously consider the "folk" wisdom of those patients to whom help is extended. To do otherwise is to arrogate a type of health care (in this case, clinical pharmacy intervention) that subjugates the patient thereby eliminating participation in the treatment regimen. The future of clinical intervention on the part of the pharmacist should be less a case of the authoritative reflection of the practitioner's values and more of a joint effort of the practitioner and patient to resolve problems of illness.

DISCUSSION

Patient medication education has been studied extensively in the medical literature. Health care professionals (physicians and pharmacists) have agreed upon general guidelines for patient medication

education. This focus, through the health care professionals' perspective, has involved information on drug action, techniques of administration, directions for appropriate use, refill instructions, precautions and storage requirements. However, when this study was begun, the impact of patient-held beliefs on this medication education had not been described in the medical literature.

The present descriptive ethnographic study explores the personal organization of beliefs held by patients, using an interview format as the data-collecting instrument. This study identifies basic patterns of impressions which may have been inherent to this patient population. This study also examines those beliefs which may have become more steadfast after the initial crisis of trauma or illness. These beliefs form a framework of educational security which has been previously unrecognized by health care professionals. The patients within this study group include patients on the University Hospital Rehabilitation Unit with spinal cord injuries, stroke, malignancies with resulting paralysis, and myelitic conditions.

This research is based on a descriptive approach to the study of the human belief system, using Maslow's hierarchy of needs, within the sick role model of the health care system. The actual pattern of beliefs inherent to each patient determines the extent of the sick role demonstration as well as the degree of interest expressed by the patient for medication education.

One key concept examined throughout the interview period involves the actual degree of acceptance each patient has achieved concerning the injury or illness. Although the concept of "acceptance" is a subjective parameter, all the patients in this study have achieved some level of

acceptance and talk freely about their conditions. At times, these discussions are encountered by the tears of patients who genuinely search their thoughts for true expressions. Since the patients on the rehabilitation unit are similar by related physical conditions and yet different by degrees of individual cognitive expression, selecting patients with some level of acceptance of their conditions allows for an amount of homogeneity within this patient population. Although belief patterns may change at any moment for a given patient, this component of acceptance allows for some stability of the belief system during the interviews.

The "typical" patient in this study is a 41 year-old married male having a recent spinal cord injury. No dominant occupational patterns are demonstrated due to the vast varieties of jobs. This "typical" patient tends to be of the Mormon denomination. This is not entirely unexpected due to the historical influence of this faith in the great Salt Lake valley. Although the patients do not specifically state during the interviews that their beliefs are influenced by the Mormon culture, this concept cannot be entirely abandoned.

In the introduction of this research project, Maslow's hierarchy of needs is explained in great detail. A clinical model of basic needs is extrapolated from this Maslow model in an effort to better understand the perceptions and motivations which make people act as they do. The objective of the clinical model therefore is to promote a better understanding and appreciation for the beliefs of patients.

The extrapolated model describes a pyramid of clinical human needs from the lowest and most concrete of needs to the highest and more abstract of needs. The pyramid's base includes the physiological needs

necessary to promote species survival (such as oxygen, food, and water). No changes from the clinical model are necessary at this point.

Satisfaction of the physiological needs provides a foundation for the emergence of the second basic clinical need: the need for safety in the form of good health. Before proceeding any further, a baseline had to be established concerning each patient's interpretation of "health". Since this research involves beliefs concerning "health" in general and "medications" in particular, the patients provide their personal interpretations of these terms from their own experiences.

Fourteen patients define "health" in purely physical terms. This is not an unexpected result since physical symptoms may be easily recognized by a person since they can present as an inconvenience to performing daily routines. The term "health" is generally described in optimistic tones by such phrases as "good health", and "feeling good". No references to the relationship of health and disease are ever made.

Eight patients choose to describe "health" by combining physical and emotional interpretations. The human mind is characterized as being as important as the human body. Careful maintenance of one element such as the body also requires a careful maintenance of the other element, the mind, to promote a healthy balance.

Only three patients choose to define "health" as a component of only the mind. The mind controls the functions of the body and, therefore, regulates the tolerance levels for symptoms. This group of patients does not describe "health" in the optimistic sense. Rather, this group describes health in the "present" sense where health reflects the current state of the body.

Finally six patients are not able to give a basic definition of health. Their illness or injuries create a reality where health is too painful to define due to many emotional ties with that term. For these patients, health is a precious commodity which was once taken for granted and now is gone.

The clinical model mainly defines health in physical terms. In order to incorporate the responses of these patients into this model, some modifications are necessary. The model must now accommodate for the emotional, physical/emotional and metaphysical aspects of the health-safety need.

When the patient feels his health is either no longer optimal or tolerable, he desires some type of relief or treatment. In this study, 21 patients state that some form of self-treatment is instituted initially. Many patients mention home remedies which are helpful to ease many ailments. Some of the more common remedies include honey and lemon or chicken soup for a cold. When home remedies are not helpful or when a more potent remedy is desired, the patients purchase over-the-counter medications. Aspirin is the most commonly purchased product for treating colds.

Although these patients use several types of medications, a definite pattern emerges concerning the definition of a "medication". Overall most patients believe that a "medication" and a "drug" involve two separate categories. Medications alleviate symptoms to promote or maintain good health while drugs are highly addictive and could possibly destroy the healthy status of a person. Since the national and local news media are filled with stories about famous people who overdose on drugs, about police raids which "bust" illegal drug laboratories, and

about suicides which involve certain drugs, the lay public is easily influenced to believe that "drugs" are a malicious component of society.

Many patients also desire to promote good health in an effort to prevent such illnesses as the common cold. These patients are interested in natural cures using home remedies and incorporating natural foods (which some call "health foods") such as the high fiber vegetables, bran and whole wheat.

This patient population attempts to satisfy the second hierarchial need of the clinical model of promoting good health by emphasizing the four basic food groups of a proper diet or purchasing natural food products which supplement the balanced diet. When the patient's health status is not optimal (the now unsatisfied health need), the patient purchases over-the-counter medication products initially or when home remedies fail to provide relief. During this time, the patient exercises his privilege to consult family or friends for other opinions of treatment to relieve his symptoms. At this point, the clinical model is not modified but rather acquires a more detailed structure.

When the patient discovers that his methods of treatment are ineffective, he seeks advice on a more professional level. At this stage, he considers the opinions of medical professionals or faith healers. Here, the patient makes an entry into the health care system. Since this research does not delve into the patient-held beliefs concerning faith healing, only the medical aspects of the health care system are considered. Because he appreciates the importance of his once good health, the patient also realizes the vital role which he plays in the health care system as "the patient". This realization is probably more of a subconscious effort since most healthy people do not

desire to be "patients". The reference to "patient" reflects the transformation of the "person" in the popular sector to the "patient" in the professional sector of the health care system. The realization of this vital role parallels the third need of the clinical model: a place within the health care system.

The impetus to seek medical care is influenced by beliefs which patients have concerning physicians and pharmacists. The physician is described as a highly knowledgeable person in the areas of disease, diagnosis and treatment parameters. The physician is noted by the patient as being the "restorer of good health". Since the physician is so intimately associated with the patient's health record, the patient believes that this relationship is truthful and honest. This relationship provides the bridge between the patient's lack of technical medical jargon of his medical condition and the physician's understanding of that patient's medical problems.

Since this relationship is valued so highly by the patient, any factors which are destructive to that relationship are considered traumatic. One such factor includes the lack of conversation time spent between the physician and the patient. The quantitative and qualitative time is important to the patient. An adequate length of time is necessary for the patient to assimilate the physician's information and to decide on unanswered questions. The quality of productive conversation time is important to nurture the personalization of that relationship. The patient desires to be treated only as an equal in the eyes of humanity. He knows his knowledge base is inadequate to compete with that of the physician. However, the patient believes that this relationship is not one of competition but rather one of honesty,

openness and understanding--a learning experience for both the physician and the patient.

The entrance of the patient into the health care system is facilitated several times by interactions each patient has with a pharmacist. Many patients note that several conditions initially noticed by the pharmacist are later verified by a physician's diagnosis.

Since the pharmacist is noted to be more accessible to the lay public on an everyday basis, personal relationships could be more easily developed. The pharmacist, according to the patient's viewpoint, serves two functions: First, he dispenses medications to the patient according to the physician's prescription. Second, he serves as a medication education consultant. In this population, 11 patients prefer the pharmacist as a medication educator over eight patients who prefer the physician as an educator. This preference is due to the helpful nature of the pharmacist who spends several years studying one certain academic area, namely, pharmacy. Due to more specialized training, the pharmacist provides expert advice to the patient on medications. The physician, however, is not felt to be inadequate because he is required to spend several years studying physical diagnostics and techniques. The patient, though, believes he needs more detailed medication information to satisfy his educational needs. The pharmacist's intervention provides this level of satisfaction.

One interesting theme demonstrated throughout this research involves the team approach (physicians, pharmacists, nurses, nutritionists, etc.) to health care. No longer is the physician required to know all explicit details concerning all specialties of medicine and pharmacy. The pharmacist has grown to be an important

educational asset to improved patient care. This new role of the pharmacist provides an insight to the diversified functions and contributions of each member of the health care team.

The overall beliefs of the patients concerning physicians and pharmacists, who represent entry points into the health care system, are positive and optimistic. The patients stress a desire to confide in these professionals to seek medical opinions. If the responses of the patients ever contain negative connotations, these patients are eager to provide their personal insights or beliefs to strengthen the health care professional-patient relationship.

Although the patients agree that the entry into the health care system for the relief of symptoms is a good option, four patients with recent injuries use the system to acquire a stamp of approval on their already good bill of health. Even when no symptoms are apparent to these patients, this approval provides a means to maintain that satisfaction of the safety need of good health.

Within this same group of patients with recent injuries, seven additional patients enter the system to determine if present medications are controlling certain health conditions or to determine which medications or therapies may relieve allergies. These patients have either a demonstrable need (e.g., an allergy) or a less obvious condition which is being controlled by a medication (e.g., hypertension). Once again, the utilization of the health care system provides a means for safety-health need satisfaction.

Finally, four patients in this group state they enter the system only in life or death circumstances. Such patients neither desire to obtain a health professional's advice concerning their health status nor

question the severity of seemingly "benign" symptoms (e.g., a constant headache). Health is only a concern when it becomes an inconvenience to deal with intolerable symptoms. For these patients, the safety need of good health is neglected until the physiological need of life itself is at stake. Only at that time would they decide to put their health objectives into perspective.

Those patients with older injuries or illnesses demonstrate belief patterns which are not strikingly different from those with more recent injuries or illnesses. Five patients state they have maintained closer contacts with their physicians after becoming ill. Only one patient has visited his physician more frequently before his illness. (This patient also questions the accuracy of his own memory). These patients stress the high value which they place on health and life itself. Because of the time between the onset of the injury or illness and the timing of the interviews, these patients have had much time to question, contemplate and understand their new focus on life. Their beliefs have had time to "mature" to the present state of acceptance. Since these patients have experienced a time lag between injury onset and the focus of one's perspectives on life and their needs as individuals, health care becomes a more significant component of their lifestyles. The pharmacist, physician and other health care professionals are important characters in the lives of these individuals. These patients have realized the important role which they play in the health care system. The system provides services to the patient provided that the patient supplies some feedback to the medical professionals (such as his present complaints). These patients, through their interactions with the medical professionals, hold a high regard for those professionals.

Appreciating the importance of good health, the patients constantly stress the significance of the actions necessary to promote good health. The acknowledgement of such ideals reflects the actual degree of belief maturation perceived by these patients. This maturation step of self-gratification, and the realization of the importance of each patient in the health care system, evolves into self-actualization--in essence, becoming the holistically ideal patient.

As time progresses, those patients with more recent injuries or illnesses may experience a similar growth and maturation of their belief processes. These themes concerning the significance of the patient's role, his self-gratification and actualization, parallel those stated in the clinical model and also provide more detail for that model.

Once the patient progresses to this level of the clinical need model, he possesses at least a baseline of satisfaction for those needs. However, most patients desire to question the unknown and unfamiliar to understand the complexities of the human body. These details enable the patient to form a new framework of understanding surrounding his beliefs about medications and health care.

The matter of obtaining a second opinion is viewed as a necessary option for the patient's satisfaction of curiosities concerning his own health. This option allows the patient to maintain some form of control over his health care plan. For some patients, the physician assumes a mystical or omnipotent quality which makes further questioning of the diagnosis unnecessary. Other patients realize that these professionals have human qualities and can easily make mistakes. In this group, the option of obtaining a second opinion is more heavily utilized.

The desire to know and to understand is vividly illustrated during discussions concerning the importance of medication education. When the health care professional invites the patient to actively participate in medication discussions, the patient believes his own input is important to his overall health care plan. The educational material provided by the health care professional combined with the patient's input provides an enhancement of the patient's confidence levels. This boost in confidence further complements the desire to know and to understand the unfamiliar.

Various methods are used by the patients to learn about health. Reading magazines represents the most common active means of learning about health topics. Listening to health television programs or physicians' statements on health represent the two most common passive means of learning about health care. If the patients have personal health problems, a majority (20 patients) stress the necessity to visit the family physician since he is considered to be the expert concerning health problems. If further information is needed, this physician acts as a referral person.

No matter where the health information originates, the patients believe the credentials of the author of this information is an important consideration. This idea becomes more evident when the patients comment on the questionable information which is present in such tabloids as The National Enquirer. Although most of these patients are skeptical about the truthfulness of these tabloids, some patients feel that people should at least be aware of the medical content which others are reading in these papers.

The epitome of this need for knowing and understanding general health information is demonstrated by the patient with terminal cancer who supports all types of research concerning his disease. Although he will probably never benefit from such research, the need to know and understand his disease and its treatment creates an inner peace and comfort during his final days.

This need to know and understand general health care also includes an understanding of medications. As mentioned previously, the patients stress how health care seems to be more patient-oriented today. The patient no longer assumes a passive role but rather desires to participate more actively in his health care plan. Buying over-the-counter medications requires an understanding of these medications. Once the patient believes he understands how the medication affects his body, he also has to be sure the product is safe. Tamper-proof seals offer a form of this security. The product, however, is not used unless a genuine need exists, such as a symptom of pain.

Many patients believe that their medication education represents a significant influence in their everyday lives. Those patients with complicated drug dosage regimens feel secure about receiving more information on the compatibility of additional drugs with their present drug dosage regimens.

Sharing medication information is important to the patients because their education base is complemented by the experiences of others. This information also acts as an influence upon beliefs during self-treatment in the sick role model. Sharing information and sharing medications, however, are considered as two entirely unrelated matters. Medications, especially prescription medications, are considered to be a very

personal possession prescribed especially for a certain individual. Many patients fear using another's prescription because of possible allergic reactions. Because these medications require a prescription and are kept "back with the pharmacist", most patients believe these medications are not safe in the hands of the common person without special educational instructions. Because of the special "sanctity" of prescription medications, the information relayed to the patient by the pharmacist or physician is considered by the patient as being specifically tailored for his health care plan.

This modified clinical model provides a hierarchy for the growth and maturation of beliefs within the patient's popular sector of the sick role model. The popular sector can be thought of as a matrix with several types of beliefs: individual, family, community and social beliefs. The current pattern of predominating and subordinating beliefs within this arena anchor the cognitive choices of the patient within his population. Depending on the popular sector's culture with its defined system of beliefs, the patient's expression of the sick role may vary from culture to culture and population to population.

Nevertheless, patient beliefs compose a fundamental part of health care. These beliefs are molded, shaped, destroyed, and reborn through the various influences and experiences of that patient inside and outside the health care system. Belief systems may be defined by a certain culture but the patterns of these beliefs are neither stagnant nor universal for a population. The various influences and experiences provide allowances for pattern modifications. For this reason, a patient's health care choices may demonstrate a pattern of change over time. The patient's beliefs as described by the clinical model form a

conceptual framework and provide a secure base for that patient to process and assimilate incoming health and medication information in a decision-making process.

In health care, the "patient" is exposed to medical information such as a diagnosis or medication instructions which may affect him directly. One of the facets of health care concerns the education of the patient. Depending on the pool of health and medication beliefs being maintained by the patient, the incoming medical information may be very compatible or highly incompatible with his beliefs. These beliefs serve to modify the information to an acceptable, understandable and meaningful level for the patient. This modification process itself may unintentionally change the information to a form not compatible with the educational goals of the health care professional.

This alteration process occurs "silently" and the patient and health care professional may not recognize its presence. For the patient, this process is part of his everyday function so, of course, he would not necessarily notice it. The health care professional, on the other hand, does not realize this is occurring because he has not taken the time to really "get to know his patient". In the process of learning about the "person" of this patient, the health care professional realizes that this patient does possess a set of beliefs which influences this patient as a "person". Too many health care professionals fail to recognize the interior make-up of the patient to identify that "person" inside the body. When the health care professional at least attempts to perceive the beliefs (especially those involving health and medications) of the patient, he can decide on the incompatibilities these beliefs may have with his own beliefs.

(Remember too, that the health care professional is initially influenced by his own beliefs while developing the educational goals for his patients.) If the patient's beliefs are considered within the educational scope of the health goals and formats, the information being conveyed by the health care professional may tend to be perceived with similar meanings by the patient. Being aware of basic health belief patterns, the practitioner is more likely to supplement his discussions to enhance the patient's understanding.

A reasonable question to derive from this research is, "What are the implications of this study to benefit the pharmacist?" Today, the phrase "clinical pharmacy" boasts of many definitions including "a specialty of pharmacy". This phrase actually refers to those aspects of pharmacy practice which focus on therapeutic more than administrative or distributive components. The therapeutic aspects of pharmacy primarily center around the patient.

In the "old days", the term "druggist" was commonplace. The druggist was interested in making a decent living while providing the public with those goods which were in demand. Druggists during that time were frowned upon by physicians if they discussed medications with the patient. This attitude today has revolved 180 degrees where the pharmacist is now a consultant to the physician to aid proper patient medication administration and therapeutic outcomes. The role of the pharmacist today involves more clinical activities to promote quality patient health care.

Although pharmacy has become more patient-oriented, clinical pharmacy practice lacks a body of consistently practiced systematic approaches to the patient. Theoretical guidelines are constantly being

proposed by pharmacists to enhance patient-pharmacist interactions. However, the development of these guidelines does not consider patient beliefs which have an important influence upon these interactions.

The major implication for pharmacists (and other health care professionals) in this research demonstrates a need to become astutely aware of the social contexts of the patient concerning health and medication beliefs as they relate to health care practice. The awareness and recognition of these beliefs not only enhances the educational process but also serves to strengthen the patient-pharmacist relationship. This is an important consideration in light of a recent survey performed by the American Medical Association which discovered that two-thirds of the American public is experiencing a growing disillusionment with physicians.[73] Recognizing a critical problem such as this one may save pharmacists from a similar experience.

Most patients regard the physician and pharmacist as technically competent but they also look for warmth and interest from those practitioners in the face of illness. This interest is assessed by the amount of time spent and the encouragement offered to the patient to ask questions and receive appropriate responses.

Much of the dissatisfaction stems from the chronically ill or debilitated patients who are frustrated not only by their permanent conditions but also the difficulties in obtaining information and advice. This problem originates from lack of effective patient communication from the health care professional. Being aware of the patient's thoughts, attitudes and beliefs serves to promote more productive patient-practitioner relationships.

One growing aspect of health care which impacts physicians, pharmacists, and other health care professionals involves the intrusions of major corporations, health maintenance organizations and proprietary enterprises. These professionals are being pressured to yield some of their traditional autonomy and authority to administrators whose goal is a margin of profit. Some practitioners feel this pressure more than others and this may impinge on effective patient care. While the American patient still continues to have confidence in physicians and pharmacists, the patient remains their strongest ally in resisting private and public administrative authority. The patient retains this attitude only as long as he is "No. 1" in the health care system with strong productive relationships. Physicians and pharmacists must recognize the urgency of their responsibilities to the patient with the acknowledgement of beliefs to promote effective communications as an essential obligation to the patient.

Clinical Implications

Several implications are learned from this research concerning rehabilitative (rehab) pharmacy practice at University Hospital:

1. Pharmacists are demonstrating effective patient communications by the detailed education discussions and are representing the patients' choice as the "preferred educator" according to this patient population.
2. Most patients refer to these pharmacists as "he" rather than "she". Since this patient population prefers the pharmacist as the patient medication educator and since the staff pharmacists are usually male (compared to one female faculty rehab clinical pharmacist),

these staff pharmacists are making an effective effort to educate the patients with detailed information.

3. Although the pharmacists are the effective and preferred educators according to this patient population, more efforts must be made to enhance their accessibility to these patients.
4. Pharmacy residents are demonstrating an active role in teaching rehab patients about their medications. According to these patients, they represent a wealth of information concerning medications.
5. Pharmacists on this rehab unit must incorporate more fundamental information into their medication discussions. These concepts include discussions of such terms as "medication" and "drug"; the role of the pharmacist, pharmacy resident and pharmacy student; and that the rehab pharmacist is always willing to answer the patient's medication questions even though he/she may not be physically present on the unit at that time.

Several lessons are also learned from this research for health care professionals in general and pharmacists in particular:

1. Vast patient belief combinations can enhance or hinder the educational process.
2. Patient beliefs play a significant role in the foundation of the medication education process.
3. Pharmacists and other health care professionals must consider the beliefs of patients according to the clinical model to note deficiencies in their relationships to these patients to improve future effective communications.

4. The practice of pharmacy and medicine must maintain its humanistic approach in the face of technological advances or breakdowns in the communication process are likely.

Implications for Future Research

Given these data and limitations of the study, what is a priority for future research? This study identifies a small fraction of beliefs held by a small number of patients on a rehabilitation unit located in one geographical area. Due to the time limitations of this study, only a small fraction of beliefs are examined. Future implications involve more studies on this particular rehab unit to identify an even larger fraction of beliefs. More data are necessary to identify and understand the roles which such influences as religion (especially in this Mormon valley of the Great Salt Lake) and the "family element" play on these beliefs.

Although this study attempts to identify those beliefs which patients have before and after the onset of an injury or illness to identify any comparisons, no real conclusions are reached. Patients with older injuries demonstrate a more mature outlook on life and their personal expectations than those patients with more recent injuries or illnesses. Many patients with older injuries state too many years had passed since the onset of the injury or illness to recollect how they felt before the injury or illness. Choosing patients with injuries which occurred 2-5 years ago instead of 10-20 years ago may enhance the recollection of these beliefs.

This belief identification dilemma must be evaluated concerning other influences (such as religion and family) because the belief pool

of a patient continually changes. Beliefs are neither stagnant nor universal. Each new patient represents an untapped wealth of information which can further develop and expand this initial collection of beliefs noted from this research project.

Although belief-identification studies may be initiated on other University Hospital patient care units, this study should be continued on the rehabilitation unit where a framework has initially been developed for the observer. Once a strong belief pattern is established in this unit, the beliefs can be compared to those found on other rehabilitation units across the United States to extrapolate general patterns of beliefs for the rehab population nationally.

The rehabilitative patients may represent a distinct patient population where these beliefs may be specific only to them. Extrapolation of these specific beliefs to other patient populations (cancer patients for example) may not be possible unless specific belief-identification studies are performed in those patient groups.

One extrapolation however is possible: The importance of the health care professionals' awareness of the significance of patient beliefs in the overall communication and education processes promotes patient understanding and strengthens present relationships between the patient and these professionals.

This research project is an exploratory ethnographic approach to discover as much as possible about the beliefs of rehabilitative patients. This research uses no original hypotheses or theories upon which to base this study. Instead, theory is discovered from the data which is systematically obtained and analyzed by this observer. The

discovery of theory from data is called "grounded theory", as defined by Glaser and Strauss.[74]

The hypotheses of medication beliefs were unknown at the initiation of this study because the resource (patient) remained to be tapped and explored by this observer. Testing a hypothesis requires prior data. At that time, no such data had been published in the medical literature.

According to medical-anthropological literature, generating theory has become less important since emphasis has been placed on the verification of hypotheses as the chief mandate for excellent research. Generating theory is a method to arrive at theory suited to its supposed uses. It provides the researcher with strategies to handle the data while providing modes of conceptualization for describing and explaining the data. It also provides a means by which crucial hypotheses can be verified in the present and future.

This research, steeped in grounded theory, provides the reader with several hypotheses which remain to be tested by future research:

1. Pharmacists are the more efficient, effective and preferred patient medication educators.
2. Patient beliefs provide the initial framework for the pharmacist to base his educational goals to develop medication education programs which are more conducive to the patient's acceptance and understanding.
3. Traumatic experiences which result in serious injury (such as spinal cord injuries) significantly contribute to a person's understanding of the meaning of "health".
4. When the patient's beliefs are considered and utilized during the medication education process, the patient tends to agree with and

retain this information more so than when his beliefs are not considered in the education program.

5. Maslow's hierarchy of needs provides a productive conceptual framework on which to identify the beliefs of patient as demonstrated by the extrapolated clinical model of patient beliefs.
6. Patients, under the direction of the pharmacist, require more detailed medication education to satisfy their need to know and to understand. The pharmacist should be the one to decide the appropriate amount of educational detail after examining the patient's belief pool.

The picture which emerges from this research is one of growing communication needs--the need to know and to understand as demonstrated by Maslow.[75] Before this communication process between the pharmacist (and other health care professionals) and the patient can grow, it must be critically analyzed by future research. The starting point involves an elaborate identification of patient beliefs with an analysis of their meaning. Identifying and understanding those beliefs which motivate the patient to act as he does will provide the pharmacist with a solid foundation to base future medication education programs.

APPENDIXES

APPENDIX 1

OVERVIEW OF THE UNIVERSITY HOSPITAL REHABILITATION UNIT AND EDUCATION PROGRAM

The University Hospital Rehabilitation Unit is located in Salt Lake City, Utah and serves the Intermountain Western region of the United States. Patients originate from Utah, Idaho, eastern Nevada, Wyoming and occasionally from Montana and New Mexico. The disabilities of the patients include spinal cord injuries, strokes, muscular dystrophy, head trauma and several myelitic conditions such as herpes myelitis.

The rehabilitation unit (rehab unit) occupies two floors in the hospital. Administrative offices and therapy areas are located on the first floor while the patients' rooms and social areas (dining room, visitors' lounge and patio) are found on the second floor. This unit accommodates a maximum of 32 patients.

The rehab medical staff is composed of three attending physiatrists, one chief resident, and two or three first or second year residents. The residents rotate to other rehabilitation facilities in the Salt Lake valley every three months.

The rehab nursing staff consists of three to four registered nurses (RN) and three licensed practical nurses (LPN) per day and evening shifts, two rehab technicians and one aid. The rehab technician provides the same services as the LPN but does not administer medications. He performs such duties as sterile dressing changes, respiratory care, urethral catheterizations, bowel and bladder management, and oral and gastric tube feedings. The aid provides baths, patient dressings, oral feedings, and urethral catheterizations.

The nursing staff incorporates an element of primary nursing care on this unit. Every work shift, four teams provide care for the patients in designated geographical areas of the rehab unit. Each team consists of one RN and two LPNs who care for 8 to 12 patients depending on the unit's patient load. Each nurse on the team provides the patient's care-plan, nursing care, medication administration, and teaching responsibilities (including patient nursing management and very general medication education) for the same patients.

Two rehab teams are each headed by an attending physiatrist. Every two weeks, the team, comprised of physicians, nurses, physical and occupation therapists, social workers, a psychologist, speech therapists and the patient education coordinator (who is responsible for developing and scheduling education programs for the patients) meets in an

"evaluation conference". During this meeting, each patient's overall progress is assessed by examining medical, social, and educational goals.

Besides the medical and nursing members of each rehab team, pharmacy is represented by a faculty rehabilitation clinical pharmacist (Doctor of Pharmacy degree) who rotates between the rehab teams daily to monitor each patient's drug therapy. One graduate pharmacy resident (pursuing the Doctor of Pharmacy degree) may be assigned to a given rehab team for six weeks and is responsible for obtaining each patient's drug history and monitoring that patient's drug therapy for therapeutic and adverse effects, drug-drug, drug-food, or drug-disease interactions and providing medication education to the patient and team. An undergraduate pharmacy student may be assigned to the other rehab team for five weeks. He is responsible for similar yet less extensive pharmacy functions (drug histories, formal patient presentations, and the uses and side effects of each patient's medications). The hospital staff pharmacist is responsible for dispensing self-medications and discharge medications while instructing patients about these medications. He is encouraged to participate in patient rounds and pharmacy rehab discussions whenever possible.

Once the patient is medically able to participate in physical and occupational therapies, he is enrolled in such programs. Here the patient learns to maximize motor abilities while incorporating activities of daily living which are compatible to his disability (writing, cooking, bathing, etc.).

Whenever the patient is prescribed a new medication, he receives education from the pharmacist (clinical rehab pharmacist, pharmacy resident, pharmacy student or staff pharmacist) who instructs the patient on the directions for using the drug, common side effects and possible interactions. Nurses are instructed to provide general information (drug name and use) when administering the drug to the patient to help reinforce that information learned from the pharmacist and physician.

When the rehab team feels that the patient is capable of understanding and self-administering his medications (including the drug's name, use, directions, common side effects and the importance of his compliance to the drug dosage regimen), he may be placed on a "self-medication" program. In this program, the patient is responsible for taking his own scheduled medications. All "prn medications" (those administered only when the need develops) are still given by the patient's primary care nurse. The pharmacist visits the patient daily to review the patient's drug education, answer questions and check medications. The patient who successfully completes the self-medication program is considered to have a good compliance record for home medication therapy.

Prior to discharge, the spinal cord injury or stroke patient participates in an educational program for their respective conditions. Each program consists of a slide-tape show, handouts, brief lectures by

health care professionals, demonstrations and a discussion period. The spinal cord injury topics include physiological spinal cord changes, bladder and bowel management, skin care, common complications, and medication education. The stroke topics includes speech problems, muscle-tone management, mental changes in the stroke patient, the physiological basis for strokes and medication education.

The medication education section of each program is conducted by the rehabilitation clinical pharmacist who discusses the commonly prescribed medications for each respective condition (spinal cord injury or stroke). The highlights of discussion include the names of the drugs, general reasons for their use in a patient, common side effects, and common drug-drug, drug-food, drug-disease interactions (including nonprescription medications). Patients are encouraged to ask questions and provide any input of personal experiences (such as side effects) with any of the drugs. The sessions provide a good time to review medications and learn from the questions and experiences of other patients.

Once the patient is discharged from the rehab unit, he returns to the rehabilitation outpatient clinic in four-six weeks for a follow-up visit. Provided the patient has no new medical problems, he returns home to the care of his private family physician. Routine visits to his rehab physician are scheduled every six months provided no other complications arise in the meantime.

The overall patient-oriented goal of the University Hospital Rehabilitation Unit is to continually elicit the patient's health goals as he discovers the extent of his physical disabilities through physician-directed education, physical and occupational therapies and pharmacy-directed education concerning his medications. This continual elicitation allows the staff to assess his degree of acceptance of the condition and his progress during the program. A patient may initially say, "I just want to get out of here" in hopes that this devastating episode is one bad dream. This is not an unusual response since the patient does not yet understand or recognize the extent of his disability. The rehab team however monitors the patient's progress as the patient learns the significance of proper bladder and bowel management, skin care, compliance to his medications and other aspects of patient care.

APPENDIX 2

INFORMED CONSENT FORM

You are being asked to participate in a research study at the University of Utah Medical Center Rehabilitation (Rehab.) Center. The purpose of this study is to determine what patients believe about health care and medications. Your participation will involve an interview on health care and medications with the investigator, Patricia L. Orlando, graduate pharmacy student. The interview will take at least one hour of your time. The date and time of the interview will be determined by you and Patricia Orlando. You may stop the interview at any time due to fatigue or other circumstances. The interview will then be completed at a later date decided by you and Patricia Orlando. All interview forms will be kept confidential and destroyed upon completion of the research. Your name will not appear on any section of the interview form. The information obtained from the interview will be used to develop medication education programs which will be more helpful to you and other patients in understanding medications. The information from this study may be used for medical and scientific purposes, including publication, with the understanding that your identity will not be revealed unless you expressly consent thereto. You are free to withdraw consent and to discontinue participation in the study at any time without prejudice.

The following people may be contacted for any further information concerning this research study:

Patricia L. Orlando, Graduate Pharmacy Student, 583-1308
Jean K. Devenport, Pharm.D., Rehab. Clinical Pharmacist 581-8054

_____

Patient Date

_____

Witness Date

APPENDIX 3

INTERVIEW FORMAT

The following outline depicts the interview format which will be used by the investigator to elicit patient held beliefs concerning medication use:

Interview No.____ Age___ Diagnosis_____

Date of Injury_____ Sex__ Years Education____ Religion_____

Marital Status_____ No. Children_____

Occupation_____

1. Are any members of your family health care professionals such as nurses, doctors, pharmacists, etc.?

   Which type of health care professional?

2. How many times per year did you see your family doctor before your illness?

3. How many times per year do you see your family doctor now?

4. How many times per year do you see your rehab. doctor?

5. What was the duration of your hospital course (surgery, intensive care, etc.) before entering the rehab. program?

6. What does the word "health" mean to you?

7. What types of activities can a healthy person participate in?

8. If you heard about an unfamiliar disease and wanted to learn more about it, where would you go for information?

9. If you personally had this disease, would you go to this same place or person or would you go elsewhere to learn about it?

10. Do you think it is important to learn about health? Why or why not?

11. Which areas of health/health education do you think are most important to learn about?

12. Do you like to listen/watch any health-related programs?

    Which ones do you enjoy most? Why?

    What types of information is given on these programs?

13. Do you own or have access to a cable TV?____ Have you ever watched the health channel which deals exclusively with health topics?____ What have you learned from such programs?

14. Do you like to read any magazines?

15. Do any of these magazine articles relate to health?

16. Please give me an example of a health article which you have read.

17. What types of information in articles/TV programs/radio shows do you find the most helpful for your health education?

18. Are you aware of the weekly newspapers called The Globe or The National Enquirer?

19. Do you like to read either of these newspapers? Which ones?

20. Do you think that their articles about medical discoveries and treatments are important? Why or why not?

21. Do you ever question any of the health-related information which you hear? Why or why not?

22. Do you ever seek second opinions? Why or why not?

23. Which health-related references have you read? (Examples: Gray's Concise Medical Encyclopedia, American Medical Association Family Medical Guide)

24. How would you find out about any references which you may want to read?

Medications

1. When you are feeling sick, would you decide to treat yourself? Why? How?

2. At what point would you decide to obtain expert advice?

   Where would you go for this advice?

3. What home-remedies do you think are helpful when you are feeling sick?

   How did you learn about these home-remedies?

4. What over-the-counter (nonprescription) medications would you tend to buy to treat yourself?

5. How did you become familiar with these products?

6. Which health food products have you purchased recently?

   How did you become familiar with these products?

7. Do you feel that health food products are important to maintain good health? Why?

8. Do you think everyone should use health food products? Why?

9. Where do you buy your health-related nonprescription products?

10. When you read or hear an advertisement for a new nonprescription medication, would you want to try this product sometime? Why?

11. What makes you want to try new medication products?

12. How would you define the word "medication"?

13. What is the difference between a drug and a medication?

14. Do you think more about your health care now or before you had the accident/became ill? Why or why not?

15. Do you consider vitamins as drugs? Why or why not?

16. When you buy nonprescription medications are they safe to use? Why or why not?

17. Are nonprescription products ever not safe to use? When?

Health Care Professionals

1. If you thought you were coming down with a cold, would you get advice from your parents, relatives or friends on how to treat your illness? Why or why not?

2. Would you be tempted to use a medication which a friend found useful for his sickness? Why do you think this way?

3. If you found that a medication did wonders for your illness would you offer it to a friend? Why or why not?

4. What do you think is the function (role) of a doctor in health care?

The following questions 5-11 will refer to doctors in general and not to any specific doctors or other health care professionals:

5. On the average, how much time does your doctor spend with you discussing your medications?

6. Do you find the conversation which you have with your doctor interesting?

7. What do you enjoy most about these conversations?

8. What do you dislike about these discussions?

9. What does the doctor usually tell you about your medications?

10. Do you feel that doctors give you enough time to ask questions about your medications?

11. Do you ever find that some questions which you ask are not answered very well? Why do you think this happens?

12. Please tell me what a pharmacist does in health care.

13. In the hospital setting, please tell me who you feel is the most helpful to you to provide you with information about your medications?

14. How does this person make this information understandable to you?

15. Who do you feel is better prepared (with knowledge and ease of understanding) to provide you with education on your medications?

16. Why do you feel this person is better prepared?

17. When you learn that you will be taking a new prescription, does the pharmacist or the doctor spend more time providing you with information?

18. When the doctor tells you about your new medication, what information does he provide?

19. What information does the pharmacist provide?

20. Please describe a pharmacist who you have known and has really helped you.

21. Do you go to a pharmacist regularly? Why or why not?

22. What types of qualities about a pharmacy would make you want to return to that pharmacy in the future?

23. Has your doctor or pharmacist always used language that was understandable to you when talking about your medications?

24. Do you tend to interrupt the conversation if any words are unfamiliar to you? Why or why not?

25. Have you ever had a discussion with your doctor or pharmacist about a new medication and when you got home you were not sure how to take or use the drug? What did you do?

26. What is the name of a drug which you commonly use?

27. Why do you use this drug?

28. How does this drug work inside your body?

29. How does this drug make you feel?

30. What other information would you like to know about the drug?

31. Given this list of medications: (provided to the patient on a separate sheet of paper)

Aspirin	Milk of magnesia
Zantac (ranitidine)	Colace
Dibenzyline (phenoxybenzamine)	

a. If your doctor told you that you may be taking one or many of these medications in the future, would you like to learn about these medications from a doctor or a pharmacist? Why?

b. Of the listed medications which are familiar to you? Tell me what you know about them.

c. What types of questions would you like to ask to learn more about these medications?

APPENDIX 4

METHODOLOGICAL APPENDIX

To assist the reader in his assessment of the data and interpretations to be presented, a detailed description of the research procedure follows.

As mentioned in the introduction, this research involves an exploratory ethnographic approach because I wanted to discover as much as possible about the beliefs of physical rehabilitation patients on a number of health-related topics. This approach involves extensive interactions between myself and the patients. The major content of this research project stems from experiences and active involvement with the patients. This study is both an existential and anthropological one.

The participant observer method has functioned as a modus operandi in the works of social science. Kluckhohn has defined this method as:

> A conscious, systematic sharing, insofar as circumstances permit, in the life activities and, on occasion, in the interests and affects of a group of persons.[76]

In this method of study, the observer acts as a participant in the study's social setting and partakes in various group activities such as watching a movie-video with the study members. In this way, the observer becomes a more integral part of that social setting. My position as a graduate pharmacy resident, who is familiar with this particular rehabilitation unit and even some of the long-time patients, facilitates my conversion into the observer's role. My aim is to obtain data concerning the health and medication beliefs of the patients by direct everyday contact by activity participation.

The advantages of this method of observation according to Morley include:

1. The actions of the group or individuals are least likely to be changed or affected by the presence of a person who is accepted as a participating member of the group;

2. Opportunities for observation are increased to the participant observer because of his close contact with the field situation;

3. Certain interactions and sentiments will come to a participant observer which would be impossible for a researcher in another role to experience;

4. The participant observer is not basically limited by a priorisms, but can reformulate the problem as he becomes familiar with the field situation;

5. Through familiarization with the field situation, the observer is able to avoid misleading or meaningless questions;

6. The impressions of a participant field worker are very often more reliable as a way of structuring observations than are the rigid structures of an index based on a questionnaire;

7. The researcher is able to 'ease' himself into field situations and choose the appropriate moment to inquire into delicate or sensitive areas. In short, the researcher is able to 'play it by ear';

8. It is possible to impute motives more validly on the basis of the interlocking aspersions and actual behavior, supplemented by occasional 'feedback' reactions;

9. The researcher can constantly reformulate and remodify his conceptual categories to provide more meaningful analysis of his problems under study;

10. He can select additional informants in such a way as to throw additional light on emerging hypotheses;

11. He can generally reach 'in depth' materials more easily;

12. He may absorb considerable information which seems at the time irrelevant, but later proves valuable for elaboration and clarification of specific points central to the research;

13. He can make use of selected informants' skills and insights by giving them free vein to report the problem situation as they see it. This is particularly important for the present research;

14. He is able to move back and forth between data-gathering in the field and desk analysis;

15. Through free data-gathering the researcher probably distorts less the difficult-to-quantify situations or aspects of a problem.[77]

The participant observer concept has face and content validity built into its structure. The constant asking and re-asking of questions and the repeating of observations on a daily routine enhance the reliability of the research.

This study concept then involves a continuum of activities from the passive observations of the researcher to the daily activities of the participants.

Considering the extreme of the continuum, that of the inactive observer, the researcher remains in an isolated nest not venturing into the active "world" of the participants. Being so detached from the intimacies of group activities, his observations tend to be those of "the outsider". This observer acts in a superficial manner to quantify interactions, feelings, and activities. Intimate observations are not possible at this extreme of the continuum. The study group, feeling the isolation of this observer, may actually change the activities of its daily routines thus distorting the "normality" of the untapped data.

At the opposite pole of this continuum, the active observer, who is integrated into the interactions and activities of the social setting, taps the intellectual resources of the participants. The exposure of sentiments is made possible by these personal observer-participant relationships. Many of the participant's thoughts reveal personal sensitivities which the participant would only want to share with someone who values the sanctity of inner thoughts. The integrated role of the observer allows such thoughts and information to flow freely isolating aspects of behavior which he considers significant.

Homans describes the participant method concept and offers five "strategies" in his observational procedures:

1. Work closely in the 'field' that is under study so that relations can be maintained among the subject;

2. Use techniques of participant observation and non-directive interviewing so that the data truly reflect normal behavior and conditions while maintaining good relations;

3. Make a detailed study of a single instance or case and then look for general patterns;

4. Be more concerned with <u>discovery</u> than with proof. The participant observer method is characterized by an open mindedness rather than a limited search for the proof of a specific narrow hypothesis. A problem does not become significant simply because it can be handled 'elegantly';

5. The researcher should concern himself with the conceptual social system and be willing to collect data and information on many topics as they present themselves.[78]

These strategies which allow for more true reflections of human behavior were carried out painstakingly throughout this research period. Besides Homans' strategies, Wakeford offers five other considerations:

1. <u>Time</u>: the maximum length of time should be spent with the group of subjects;

2. <u>Proximity</u>: the minimum social distance should be maintained between the researcher and his subjects;

3. Statuses: the number and variety of the circumstances of interaction and of statuses from which the researcher can relate to his subjects should be maximized;

4. Symbols: the maximum degree of familiarity with the symbolic communication, verbal and non-verbal, of his subjects should be established by the researcher;

5. Consensus: the researcher should attempt to obtain the maximum amount of confirmation of the expressive meanings of the group.[79]

Wakeford states that in order for a study to reach "maximum adequacy", the above conditions must be met by the observer. The adequacy of the research depends upon the extent to which the observer has experienced the culture of his subjects.[80] (Prior to the initiation of this study, I spent six weeks on this rehabilitation unit. As a pharmacy resident, I was responsible for monitoring appropriate drug therapies. Daily visits to the patients included discussions about drug therapy, patient questions or "just to talk". These conversations allowed me to understand and appreciate the attitudes and beliefs of this patient population.)

During the data collections, caution must be exercised to avoid the pitfall of close proximity and the disadvantage of over-familiarity. This danger could influence the formation of value judgements which would destroy the balanced objectivity of the study. (As the observer, I tried to avoid value judgements whenever possible by presenting a large amount of qualitative data.)

Wakeford continues:

> Therefore for maximum adequacy the participant observer would have to live a considerable portion of his life in proximity with his subjects, be accustomed to communicate using their symbols, interact with them in each possible role within the system, culture or organization, and be in a position to check each of his observations with the widest range of his subjects.[81]

Although the criteria for the evaluation of the adequacy of qualitative data is not written as explicitly in the literature as those of quantitative data, the data of qualitative research is not less adequate. The evaluation of its adequacy tends to be less agreed upon.

Becker provides insight to the similarities between qualitative and quantitative research analysis:

> In assessing the evidence for such a conclusion the observer takes a clue from his statistical colleagues. Instead of arguing that a conclusion is either totally true or false, he decides if possible, how likely it is that his conclusion about the frequency or distribution of some phenomenon is an accurate quasi-statistic, just as the statistician decides, on

> the basis of the varying values of a correlation coefficient or a significant figure, that his conclusion is more or less likely to be accurate.[82]

Becker goes on to say that qualitative data would become more scientific and less artistic if this data were presented throughout the body of the research report. This would give the reader better access to the actual data so he can assess the conclusions for himself.[83]

This research report uses Becker's approach to a large extent. Quotations are provided to give the reader access to the data and to assist him with the data analysis.

While collecting and analyzing the data for this research project, I also shared the ideas of the Pahls who express:

> We are depressed by some of the methodologically sophisticated but intellectually arid sociological literature, which to our minds dehumanizes the 'respondents'. Too often studies present the author's interpretations of respondents' interpretations of questions which the author thinks are significant and which he thinks tap 'real' problems and issues in the minds of the respondents.[84]

APPENDIX 5

DEMOGRAPHIC SUMMARY OF PATIENTS

Key to Table

DOI	Date of injury or illness onset
2^{o}	Secondary to
LDS	Church of Jesus Christ of Latter-day Saints
C	Catholicism
CA	Cancer
Ø	No preference
$T_{\#}/L_{\#}/C_{\#}/$	Thoracic/Lumbar/Cervical vertebra with lesion location
MS	Martial status (with number of children)
M	Married
S	Single
D	Divorced
W	Widowed
MVA	Motor vehicle accident
R	Right
Lt	Left
Ml	Male
F	Female
Para	Paraplegia
Quad	Quadriplegia
Parpar	Paraparesis
Quadpar	Quadriparesis
LE	Lower extremity
EMT	Emergency Medical Technician
CVA	Cerebral vascular accident

Table. Demographic summary of patients

Name	Age	Sex	DOI	Rel	Diagnosis	MS	Occupation
Alzmeir	74	F	10/84	LDS	R CVA, Lt hemiparesis	W(2)	Retired
Ashley	29	Ml	9/83	Ø	C_6 Quad 2° fall	M(0)	Unemployed
Bliss	19	F	12/84	LDS	T_{10} Para 2° gunshot	S(0)	Student
Brinkley	53	Ml	1964	C	C_7 Quad 2° MVA	D(0)	Retired
Brisbo	60	Ml	8/83	LDS	C_5 Quad 2° unknown	M(2)	Retired carpet buyer
Cubb	22	Ml	12/84	Ø	L_1 Para 2° MVA	S(0)	Taxi driver
Davis	26	Ml	9/84	Ø	Quadpar 2° electrocution	M(1)	Telephone installer
Fisker	24	F	1/85	LDS	T_{12} Para 2° MVA	M(0)	Cosmetologist
Fitzgerald	66	F	1/85	LDS	R CVA, Lt hemiparesis	M(1)	Retired company clerk
Fontana	37	Ml	9/84	LDS	T_{12} Para 2° fall	M(3)	Truck driver
Ford	24	Ml	10/84	Ø	T_{11} Para 2° MVA	S(0)	EMT
Franklin	37	Ml	10/84	Ø	L_3 Para 2° MVA	M(2)	Freight dispatcher
Frazier	29	F	1972	C	C_5 Quad 2° gunshot	S(0)	Student
Greely	20	Ml	4/84	Ø	T_6 Para 2° MVA	S(0)	Unemployed
O'Reilly	66	Ml	1/83	Ø	CA, LE weakness	D(5)	Property financier

(continued)

Table (continued)

Name	Age	Sex	DOI	Rel	Diagnosis	MS	Occupation
Panner	27	F	8/84	LDS	C_5 Quad 2° MVA	S(0)	Student
Paris	34	F	1970	Ø	T_5 Para 2± myelitis	M(1)	Factory worker
Pierce	45	F	1956	LDS	Meningioma	M(2)	Retired teacher
Randell	59	F	8/84	Ø	Polyneuropathy	M(1)	Housewife
Savage	49	F	11/84	LDS	Parpar 2° myelitis	D(3)	Telephone clerk
Shelka	41	M1	11/84	Ø	T_8 Para 2° fall	M(5)	Property manager
Sparoe	19	M1	8/84	Ø	C_4 Quad 2° fall	S(0)	Unemployed
Tomkins	25	M1	9/84	LDS	T_{12} Para 2° MVA	M(1)	Truck driver
Walker	78	M1	11/84	Ø	R CVA, Lt hemiparesis	W(1)	Retired pharmacist
Walton	67	M1	10/84	LDS	L CVA, R hemiparesis	M(4)	Engineer

APPENDIX 6

PATIENTS' INTERVIEWS

Appendix 6 provides the interview of 25 patients on the University of Utah Hospital Rehabilitation Unit. The interview write-ups are structured to include brief introductory medical and social histories. The following statements include the actual interview conversations between each patient and the observer.

JC = Joe Cubb

JC is a single 22 year-old white male who sustained a complete L-1 paraplegia after a motor vehicle accident in December 1984. After surgical stabilization, JC had an uneventful post-operative course. JC is now employed by a taxi company.

> My paternal grandmother is a registered nurse and has been the only family member who has pursued such a career. I think that maintaining good health is important. I try to keep my good health by visiting my dentist for an annual checkup. I usually see my family physician for a yearly physical exam and possibly one or two other times for nagging colds. It is important to visit your physician at least once yearly so he can tell you the actual condition of your body. Some diseases may arise without any symptoms. One way to help your body maintain good health is through regular exercise and proper foods.
>
> If I wanted to learn about an exotic disease, I would refer to a medical dictionary. If my curiosity was unsatisfied, I would call my doctor. If I knew I had the disease, I would learn about it in the same way but I would probably keep closer tabs with my doctor.
>
> Health topics are extremely important to learn about today. Before my accident, I took my own health for granted. Now I appreciate it more and more after my accident. Health involves so many topics that almost everyone can discover new interests. I like to learn about vitamins which are important even with a proper diet. Vitamin C helps to fight colds; Vitamin B maintains muscle tone; Vitamin E also has many uses. A person may like to learn about health by watching TV. I only watch health programs if they affect me personally such as wheelchair topics. Otherwise, I will turn the channel due to a lack of interest. Our cable network does not have any health channel as far as I know.
>
> Besides watching TV, a person can learn about health by reading magazines such as Sports or Sports Illustrated. One article

Job Cubb (continued)

described a football coach who was paralyzed in a football accident as a child. Today he coaches high school ball and the kids respect him even if he has a wheelchair. This story hit home for me because it means that a person should stick to his dreams and go for any opportunities that reflect his interests. My health may not be perfect, but I am still able to pursue my dreams.

Some people do like to read those newspapers like The Globe or The Enquirer. I do browse through The Enquirer occasionally because I find the articles so amazing. One issue stated a cure for spinal cord injuries which would be available to the public in 5-6 years. Animal testing has only been done so far. I think people read these papers to grasp any hope offered. I am skeptical about these articles because I never hear about them from a doctor on the TV news. If discoveries for spinal cord injuries exist, the whole world should know!

If a person needs to answer a health question, he could use a World Book Encyclopedia in the family library. One section has transparencies for learning anatomy. The body is very complex.

Whenever a health question is answered by a doctor and the person is not fully satisfied, he should have the option of asking the question to another medical expert. Doctors are human and can make errors. If someone was told they would never walk again, I think that is worthy of a second opinion.

I tend to treat myself for minor symptoms of the runny nose and aches of a cold with Nyquil. I use lozenges for a sore throat and Tylenol for headaches. If my symptoms become too much for me to tolerate or if they lasted for two weeks, I would call my doctor. My family does not have any home-remedies to make when I am sick. We usually just by the Nyquil and Tylenol at the neighborhood drugstore.

Health foods such as bran, nuts and whole wheat bread are good to maintain good health but a person has to like these foods in order to eat them. I do not like these types of foods.

Whenever a new over-the-counter medication comes out, I would buy it only if I thought it would help me. My family has used Tylenol for years and we would buy Advil only if the need arose and the Tylenol no longer worked.

Medications are used by people to make them feel better. Drugs and medications are different. Drugs are addictive like Tylenol No. 3 and morphine. Tylenol and Contac are not addictive and are called medications. Vitamins are neither drugs nor medications but rather their own classification.

The only nonprescription medications which I consider safe to use are those used by my family such as Tylenol. I do not use any

Joe Cubb (continued)

medications which my family has not used; unless it has been okayed by my doctor. I cannot speak for other people. I know which nonprescription medications are safe for me but other people may have diseases which interact with these medications.

Whenever I feel like I have a cold or the flu, I usually ask my mother on how I should treat myself. She has treated me for years. I tend to use those medications which I or my family has used before. If a friend recommended a drug, I would want to check with my doctor before buying my own. If my friend was feeling tough with a cold, I would offer my nonprescription to him and give him the choice of using or not using the product.

Doctors diagnose health problems; prescribe medications to treat health problems; do physical exams; do follow-up visits to see how you the patient is feeling. A doctor will spend a variable amount of time discussing medications. When I used Tylenol No. 3, the doctor told me it would decrease pain. I would have to take low doses to prevent addiction. My doctor usually quizzes me every day to be sure I know why I have to take my medications. I enjoy the conversations with my doctor and he lets me ask many questions. I think I enjoy talking to the LPN's even more since the RN's are too busy. The LPN tends to have more practical experience than the RN. My conversations with my doctor are interesting even when his news may not be exactly what I want to hear. My health condition is important to me. All my questions are always answered well.

When we talk about my medications, my doctor explains the action of the drug, directions and the name of the drug. The RN tends to repeat the information or quiz me whenever I have to take my meds. I have had no exposure to any pharmacists here in the hospital or outside.

A pharmacist prescribes the drug, which the doctor has written on paper, by filling that drug into small containers or bottles. I have had no other interactions with a pharmacist. In the hospital, I rarely see them. Nurses however have been very helpful to me to answer my drug questions. Nurses are very accessible and easy to talk to any time. Doctors do not have very much time to spend with patients but they do inform the nurses of their duties. A doctor is more qualified to talk about drugs than a pharmacist since the doctor has the most experience. My doctor is easy to talk to since he talks at my level. I feel at ease to interrupt the conversation if questions arise.

Even though I have had few conversations with pharmacists, I know they are required to have four years of college. A druggist is only a clerk who works in a drugstore.

I have never been in a situation where I had questions about a medication after visiting my doctor. If this occurred, I would call the doctor before taking the medication to answer my question.

Joe Cubb (continued)

Tylenol is a medication which I use frequently for headaches. I really do not know how it relieves a headache other than it does. I know the name of the drug and its main action. I follow the package directions. No other information is really necessary. If I don't learn this information, I feel paranoid taking the drug.

When I take any new medication, I only need to learn about that drug from my doctor because of his depth of knowledge.

On the given list, I know aspirin is used to relieve headaches. Alka-Seltzer is used for upset stomach and milk of magnesia is used for constipation. I have never heard of Colace, Zantac or that last term. How do you say it? If I had to take one of these strange medications, I would want to know why I need to take it as well as how I should take it. I also think it is important to know how to say the name of a medication. If drugs sound alike, the doctor may give you a prescription for another medication to which you may be allergic.

TS = Tony Sparoe

TS is a single 19 year-old white male who was rendered a C-4 quadriplegic after a machinery accident in August 1984. His hospitalization was complicated by respiratory distress which required ventilatory assistance and strep pneumonia which was successfully treated with antibiotics. At the time of this interview. TS had recently been weaned from the respirator. TS also has a history of learning problems. He quit school while in the tenth grade. He also has had numerous family problems and has been unemployed for several months.

The only people in my family who work with health every day are my mom and my sister. They are both registered nurses. Before my accident, I would visit my doctor only if I needed advice on treating a cold or the flu when my mom's advice was not helpful. I may have visited the doctor once a year but that may even be too frequent since I cannot remember my last visit.

Health is an ever-changing condition of the body. Depending on how you feel, for that day, that is your health for that day. Your health reflects the physical shape of your body. Health is an important area of study. Everyone should make an effort to know how their bodies work. The type of symptoms your body has and what you think about these symptoms (Are they serious?) will show the actual condition of your body. The most important health topic to study is how the body works. If you do not understand the details of a disease or if you have the disease, all questions should be asked to the family doctor or to a specialty doctor. I personally think health is a boring topic especially on TV since I usually turn the channel. I do not enjoy reading and have only heard of

Joe Cubb (continued)

The Enquirer. I think that having the chance of a second opinion is good but I am not sure why I would ever want to have a second opinion.

My family owns no medical references.

Whenever I have a headache or a cold, I will treat myself with aspirin and fluids. If the pains became severe or if strange sensations developed in my body, I would call my doctor. Otherwise, I would feel confident to use my own advice to treat myself.

A medication is a medicine that a person takes to feel better. It differs from a drug but I am not aware of the difference. Vitamins are not drugs. The body requires vitamins every day to live but the body does not need a drug to live. Medications are a personal thing not to be shared by others. I have strange friends and would never take their drugs.

I have never bought a nonprescription drug since I only use aspirin which my mother buys at the grocery store.

My idea of a doctor is someone who makes a person feel better. I really do not know what he does on the job during the day. My doctor never talks to me so I cannot say that we have spent time discussing medications. My only question I ever have on any new medication is, 'What will this drug do to my body?'.

GO = Graham O'Reilly

GO is a 66 year-old divorced white male who was diagnosed with prostate cancer in January 1983. He was admitted to the rehabilitation unit for pain control due to metastatic bone involvement, bladder management and physical therapy for lower extremity motor control. GO is a property financier with a business degree. He has five grown children.

The only members of my family who are directly involved with health care are my brother who is a cancer organization representative and my cousin who is a doctor as well as a previous dean of a medical school.

Health involves a precious balance of body functions. Good habits in diet and exercise are necessary to promote this balance. I usually see my doctor every month for blood pressure checks and to be sure my blood pressure pills are balanced correctly. After I was diagnosed with cancer and after experiencing its rapid growth through my body and its excruciating pain, health became a prime concern of my life. I am not yet ready to die. I want to enjoy my outdoors activities of hunting and fishing. I normally jog two and one-half miles daily to experience my 'high' in snow, rain or shine.

Graham O'Reilly (continued)

When I have questions on a disease, I prefer to talk to a medical specialist in that area. When I was diagnosed with this type of cancer, I did not know much about it. I sought more information from the specialists at the hospital.

Health is such an important course to study. A person has no idea what health really means until he is put to bed due to excruciating pain, lack of appetite and loss of bladder and muscular control. The true meaning of health tends to hit home-base when a person is not really sure he will live to see the next morning. Taking care of one's body involves good diet and exercise plans. People tend to forget about the emotional side of good health. It, too, is part of the health balance.

I enjoy learning about health on TV especially the documentaries on high blood pressure control, diets and exercise routines. I do not have access to a cable channel.

Some magazines such as National Geographic, Time, Sports and Sunset have various health articles on new medication research (Time), recipes (Sunset) and the health habits of nomadic tribes of Africa (National Geographic). I like to do health surveys. Since I have cancer, I want to know about any new research on diet in the cancer patient. It is important to keep an open mind since all the answers are not in yet. Consider all the research which has been done to link smoking with lung cancer.

I am aware of such newspapers as The Enquirer and Globe. However I have never read the articles. I would consider the medical articles to be important only if I know that the authors were authenic (leading medical doctors in that specialty field). A person should not accept this information at face value, especially if he is unsure of the credibility of the article. By talking to a doctor and obtaining a second opinion of sorts, the person can make a more quality decision for himself.

I own a single-volume health encyclopedia for quick reference of medical terms and diseases. Doctors are a source of information as well and should also be utilized.

AP = Anna Paris

AP is a 34 year-old married white female who developed a transverse myelitis in 1970 which resulted in a T-5 paraplegia. She is currently employed as an assembly line worker making intravenous tubing. AP graduated from high school and has a 15 year-old daughter.

My only family member who has an occupation in health care is my sister who is a registered nurse. I have become involved with my health since I became ill in 1970. I really cannot remember going

Anna Paris (continued)

to the doctor for regular visits before my illness. I see my doctor so many times each year now that I tend to lose count. I am forced by my condition to take better care of my health.

To me, health refers to the current state of a person's body. To have good health means that a person feels good all the time with no physical complaints. When a person has good health, he feels healthy. He can swim, bowl, play pool, fish, hunt or whatever pleases him.

Whenever I have questions concerning health in general or even my own health, I call the Rehab. Department. The doctors here do a lot of research and are up on the latest discoveries which may help me. Health is a very important area to read about today. I really never visited the doctor before I became ill. I just let my symptoms of fatigue go unnoticed and now I cannot walk. People need to be more aware of their bodies and symptoms. Proper diet and hygiene are important. The first time a person becomes sick, he should visit his doctor and maintain regular visits from then on.

A person can learn about health by watching TV. I do not have cable TV but I do like to watch exercise shows. I watched a story on 60 Minutes where a paralyzed man learned to walk with the help of electrical wires. I wondered then how I would react to that situation since I am paralyzed too.

Reading is another way to learn about health although I do not enjoy reading. I learn all I need to know from the spinal cord education courses offered at Rehab.

I feel that I have received my fair share of education on taking care of myself. I do not think the public appreciates the social problems which wheelchair folks face today. The public does not know how we have to live. Handicapped people are people and should not be hidden away. I am irritated when buildings are not equipped for wheelchairs. The buildings with wheelchair entrances are not very accessible due to doors that open in and not out.

A person can read about health in The Enquirer and not realize that only the good things about treatments or medications are mentioned. The entire story is not told to the reader. If a person keeps these things in mind, there is no harm done.

I do not own any health references because I trust my doctor's judgement. I hear about many new health ideas from the media but do not pay attention to it. I would rather ask questions to my doctor since I know his answers are trustworthy. If I am still curious, I feel free to ask the counselors and nurses on Rehab.

Whenever I feel a cold coming on, I will usually take Tylenol or fluids. I treat coughs with lozenges or a simple syrup. If I

Anna Paris (continued)

still feel terrible after three days, I will call my doctor for his advice. My mom also recommends hot tea with lemon and a shot of whiskey for colds. It is quite relaxing. Tylenol is really the only consistent medication which I buy at the grocery or variety store. I learned about it from TV and radio ads and my family.

Health foods are one way to keep good health. I do not buy them but they do increase energy levels and keep the blood flowing smoothly such as with kelp and lecithin. Everyone has different tastes and may not like health foods. Too much of a good thing can be detrimental as well. A proper diet is still very important.

The media is always advertising for new drugs. I am not influenced by these ads at all. I have enough medications to take without adding more! I will try new products only if my doctor tells me to do so. I follow his instructions and trust his decisions. He would not recommend a product that would hurt me. Everyone should ask their doctor first before buying these medications.

A medication is a drug. A drug is anything taken by mouth or through a needle that is not water or a food product. Drugs tend to make people high like Valium or marijuana. Even though a medication like aspirin is a drug, it will not make a person high. Vitamins are natural products that a person cannot get hooked on and therefore cannot be a drug.

When I am feeling ill with sneezing and coughing, I generally follow my own advice since I am not a little girl anymore. I would use my Tylenol and hot tea and call my doctor after three days. I only trust the medications the doctor prescribes and would not even consider those used by other people.

A doctor has to acquire a broad knowledge base to know how the body functions. He has to be aware of the latest treatments to comfort patients. He should be a serious person yet smile at a moment's notice. My doctor usually spends ten minutes discussing a new medication of mine. The conversations are interesting because he acquaints me with the med and how it will work in my body and how long I need to take it. He takes the time to make me feel like I really matter. Another doctor talked to me as if I did not know anything about my body. He acted like he knew everything and really did not care if I wanted to say anything. That was disappointing for me. Overall though, I feel my questions are answered completely.

My interactions with pharmacists have been few in the community. I have prescriptions refilled frequently but never take the time to talk with the pharmacist. I know the pharmacist explains how drugs work and how drugs should be taken by the patient. Nurses seem to explain the same information. I am not sure what the difference is between the pharmacist and the nurse. Both are educated to the same extent, and both have been helpful to discuss my meds. Nurses

Anna Paris (continued)

tend to be more readily accessible. Pharmacists tend to tell the same information as my doctor but spend more time on side effects and how long it takes for the drug to work inside my body.

Even though I have not talked to many pharmacists, I think of one lady pharmacist who has been very helpful to answer my drug questions. She is friendly and tells me jokes. I feel comfortable around her and she makes me feel like my opinion is just as important as her opinion. She uses language that is easy to understand as does my doctor. If I ever have questions, I make sure to ask the doctor or pharmacist before I leave the hospital. If I ever took the medication wrong, I would probably die.

My medication list includes four drugs. I take a sleeping pill at bedtime (the name is too big for me to remember), a pain pill as needed, Surfak and castor oil to keep my bowels moving. I do not know how these drugs work but they do make me feel good especially when I am not constipated.

On this list, aspirin is used for headache and fever; Colace and milk of magnesia move the bowels; Alka-Seltzer is used for upset stomach. I cannot even say the last two terms. If I had to take this last drug, I would want to know its use, its side effects, ability to make me high (I have to be sure my drugs are safe for driving.), its name and the correct pronunciation of that name.

SW = Steven Walker

SW is a 78 year-old white male retired pharmacist who experienced a right cerebral vascular accident in November 1984 which resulted in a left hemiparesis. SW has had an uncomplicated hospitalization with a main focus on physical therapy. He is a widower, lives alone and has one grown daughter.

My daughter has a Ph.D. in psychology and works for a local mental health organization. I am a retired pharmacist and my cousin is a doctor.

I have been well informed on the advances in health care since I received much literature in the mail when I was working as a pharmacist. I usually visit my physician 7-8 times per year for blood pressure checks and blood glucose levels (for my diabetes) and follow-ups on my medications for the high blood pressure and diabetes. I have always stressed to my customers that exercise is number one for good health along with good personal hygiene. These are two ways to keep the body physically fit in all the bodily functions. The emotional side of good health is also important.

Whenever health questions have developed, I would refer myself to the local public or medical library. When I was diagnosed with

Steven Walker (continued)

diabetes by the doctor, I read about the disease in the library. My doctor also provided me with some pamphlets to read. My personal library also has a medical dictionary, Merck Index, USP, PDR, and National Formulary.

Health is an extremely important part of life that most people do not understand mainly due to a lack of concern for health. I was one of those people and now I have poor health. A person cannot possibly realize what health means until they do not have their good health. It is an unfortunate realization.

Since I retired, I have not done any reading or watching TV since I have been so busy with other matters. I am aware of The Enquirer but think that the articles are over exaggerated and lack facts. The authors are not reputable scientists or doctors.

Whenever I have a cold or elevated temperature, I treat myself with aspirin, Alka-Seltzer or Tylenol. If I still feel rough after one day I usually call my doctor. Of course, if I thought I was going to die, I would also check it out with him.

Since my store was full of mild analgesics, antacids and aspirin and since I am a pharmacist, I have little need for home remedies. The only health foods I have ever tried is Ensure which is a nutritional supplement. Believe me, a good balanced diet is better than supplementing a diet with Ensure!

Medications should only be used when a need exists. A medication should not be used 'just to try it'. If I had the need (such as a headache) and I know the drug came from a reputable company I would probably use it.

A medication is a chemical or drug which is used to alleviate pains, colds or allied symptoms. The classification of drugs includes the subcategory of medications and vitamins. Vitamins are normally found in the diet but whenever they are consumed outside the diet, vitamins become drugs.

All nonprescription products are generally safe to use due to all the previous research and the good reputation of the companies. Even though a drug company thinks it may know all the side effects of a drug, the true side effect profile is seen once the general public uses that drug.

Being a pharmacist, I am more likely to take my own advice. I am usually the one who advises my friends and customers on the effects of drugs. My customers have to make their own decisions on whether to buy the product or not.

Steven Walker (continued)

My doctor spends about ten minutes discussing a new medication with me. He describes the reason for using the medication, its precautions and side effects. It provides a good review for me. The doctor can be male or female skilled in pharmacy and medicine. He diagnoses ailments, does surgery and counsels patients on mental attitudes, diet and health. The doctor is a busy person and I feel I am taking up too much of his time if I ask questions. If I do not understand his discussion, I will interrupt him.

The pharmacist is a ready information reference for the doctor and patient. He prepares medications. He develops personal relationships with patients because he has time to answer questions, to be helpful and is very accessible. The pharmacist should be a healthy individual who is intelligent and likes to talk with people.

I have had very little interactions with pharmacists on rehab so I think the doctor is more helpful to provide me with medication education. Their explanations tend to be too superficial. I would rather learn from the pharmacist since he has extensive training and knowledge on drugs. His education on medications tends to be more thorough than a doctor's education. The education which I receive on Rehab is adequate. The doctors and nurses also use language which is easy to understand.

A pharmacist and druggist are two separate people. A pharmacist is a highly professional individual who practices pharmacy in a hospital. A druggist runs a drugstore and sells candy and peanuts!

Lanoxin, also called digoxin, is a drug which I use daily. It regulates the heart beat. A person may have too high a dose if he feels nauseated and sick. If I have any questions, I always use my own references.

I know all the medications on this list! I am a pharmacist! I would like to say that even those OTC drugs should be used under a doctor's directions. All drugs are poisons and should be more heavily regulated (including aspirin). People should also take the time to learn about their medications and how to spell the names. The pronunciations can be hard but that is unimportant. People need to utilize their pharmacists more in order to learn more.

KG = Kenny Greely

KG is a 20 year-old white male who sustained a complete T-5 paraplegia after a motor vehicle accident in April 1984. During his hospitalization, surgery was performed to place Harrington rods for spinal stabilization. In December 1984, KG developed seizures which have been controlled with phenytoin. He is single, unemployed and receiving ambulation training while on the rehabilitation unit.

Kenny Greely (continued)

None of my family members have jobs in the health field. We are not a health-oriented family. Before my accident, I would only visit a doctor for severe symptoms such as stitches or dying. Now I visit my doc five times per year.

Health is important. We need it to promote a longer life. To be healthy is to be physically fit and able to exercise. Although I think health is important, I find the topic boring to read or to watch on TV. I remember watching a TV show about Mohammed Ali. The doctors diagnosed his shakes as Parkinson's Disease.

The Enquirer is a source of health information. The articles are full of crap. I tried one of their new headache remedies of massaging the temples which did not work. I need to hear this information from reputable people like doctors before I will believe these new remedies.

When I feel sick with a cold, I will just stay in bed. I may take aspirin but usually I go without any medications since I hate to take pills. I would not call my doctor unless I was unable to breathe. I do not like doctors. I never have liked them and never will like them. I do not know why I feel this way. I have had these feelings since childhood. Doctors do not allow me to feel comfortable.

Aspirin is the only medication that I buy seldomly at the grocery store.

Health foods like fruit are not a favorite of mine. I would rather eat junk food. Using health food is a personal decision.

Medications are drugs which are used to kill infection or pain. Anything in a pill form is a drug. All street dope are drugs. Only the liquid forms of cold meds and liquid Tylenol are medications. All the medications on the market are thoroughly tested for safety reasons. The consumer has to make the decision to use them properly.

When I feel sick, I follow my own advice which I trust. After all I learned from my mother over the years. If my friend offered me a medication for my cold, I would be hesitant to try it since I have strange friends who do not always tell the truth. If I need a medication desperately, I will call my doctor. I would follow his instructions for the medication but would not bother to tell my friends.

My doctor usually spends five minutes discussing the action and directions for the use of my new medication. He is a busy person who talks to his patients every morning. He prescribes drugs and watches to see that the drugs do the right job. Doctors have their own specialties too like surgery which is difficult work. My

Kenny Greely (continued)

doctor keeps our discussions short which is good since I do not enjoy talking about health. I would rather talk about sex.

The doctor is more prepared to tell me about my medications than any other hospital staff. He is helpful to tell me what these drugs are doing inside my body. The pharmacist only fills the prescription, states the dosage and says 'thank you'. 'Pharmacist' and 'druggist' are two terms which describe the same person.

The doctor uses language which is easy to understand. He cannot help that the drug names are long. I usually repeat the names to the doctor because the name is important to know. The directions and how long to take the medication are also important.

Lioresal is a drug which I use daily for spasm control. It works by relaxing the muscle to control spasms. I take 80 mg daily.

On this list, aspirin is used for headache and minor pains. Alka-Seltzer soothes an upset stomach. Milk of magnesia relieves constipation. Colace is a stool softener. Dibenzyline relaxes the bladder. I have never heard of Zantac. If I had to take it I would want to know why I have to take it. What are its directions for use? How long will I have to take it? Zantac is an easy name to remember which is good. You wouldn't want to say the wrong name on the phone or else the doctor may prescribe a wrong drug.

TT = Thomas Tomkins

TT is a 25 year-old white male who was involved in a pick-up truck roll-over in September 1984 which resulted in a complete T-12 paraplegia. His hospitalization involved a Harrington rod placement with no complications. TT is a high school graduate who is married with an infant son.

My sister who is an LPN is the only member of my immediate family who works in health care. My brother-in-law is a dentist. Before my accident I had not visited my family physician for five years. I usually only visit my doctor when I have symptoms that I cannot tolerate. I have always felt healthy until the accident.

Health is a difficult idea to describe. It relates to how a person feels. Having good health allows a person to have a job.

Whenever I have had a question about a disease, I generally ask anyone in the health field such as my sister. If I knew I had a disease, I would want to consult my family doctor. I prefer verbal information to written information.

Gaining knowledge on health is important because it allows a person to take better care of himself. I used to take my body for granted. Bladder control was never a problem for me. Now I have

Thomas Tomkins (continued)

to closely regulate it to prevent the high risk of urinary tract infections. I have learned alot about spinal cord injuries through the rehab education videos on these injuries. The health channel probably has some interesting topics but I never think to watch it. I like to read outdoors magazines but they seldom have any health articles.

My grandmother usually has The Enquirer laying around the house and I may browse through them. The articles stimulate my interest but I usually only laugh at them. These newspapers are known for not telling the truth. Look at the law suits the publishers are constantly facing! I would not place any faith in their medical discoveries unless the same information was supported by the University of Utah. A medical doctor has more credibility for a medical discovery than a journalist. Much of the information a person hears on the street or from friends involves only opinions. This information should be questioned in order to draw out any facts that may exist.

By questioning the health opinions a person hears, he may decide to get a second or third opinion until he is satisfied that all pros and cons have been stated. He may then feel more secure about his decision especially if it involves his own body.

My family owns a one-volume encyclopedia for looking up symptoms and diseases.

Before my accident, I was quite healthy. When I had a cold, I would use Vitamin C. If a sore throat developed, my mom also recommends to me to gargle with an aspirin-water solution. I also have an old prescription of penicillin which I keep on hand. The flu usually lasts one day. If I find it too hard to just sit out my symptoms, I will call my doctor after 2-3 days.

When I go to the grocery-drugstore to buy medicine, I may buy Anacin for headache. Pepto Bismol for upset stomach, and Contac for hayfever. My family used these products for years so I tend to follow tradition.

Health food is a fad. People were eating healthy long before the health food stores were built. Natural foods such as whole wheat are good in a balanced diet. My dad is a health food nut. He eats organic vitamins among other health foods and is a fanatic about his diet.

New medications like Advil that are heavily advertised do not excite me. A person should not buy drugs unless he has a genuine need for them. I take so many drugs now that I really do not want to add any more to the list. If my old standby like aspirin does not work for me, the choice of having a second similar drug like Advil is convenient.

Thomas Tomkins (continued)

Medications are drugs which are given as a liquid or pill to help a deficiency in the body. Vitamins fall into their own category because they are a natural dietary supplement.

The over-the-counter medications are tested on animals and people for several years before they are ever placed in the general market. This testing helps to ensure the product's safety. The OTC meds are also less potent than prescription meds. Even though the OTC meds are generally safe, a person has to be aware of possible drug interactions and allergies which may be specific only to that person.

When I am sick, I usually treat myself. If I need advice, I will talk to my mom, my sister or her husband who is a dentist. He has many medical books to look up stuff. If a friend had an OTC product that helped his cold, I may consider using that product. He has to be a good friend who I trust.

Doctors diagnose problems with their broad knowledge base. They treat the illness with drugs and always send a bill.

My visits with my doctor are enjoyable except when he gives me a shot. I enjoy the knowledge which I gain from our talks. He usually spends ten minutes talking about a new drug for me. He discusses the action, side effects, directions and how the drug relates to my injury. I always feel free to ask questions about terms I do not understand. Usually the visits are easy to understand.

The pharmacist controls the use of drugs. He is responsible to know the action, side effects and directions for use of a drug. The pharmacist has more specific training and education concerning drugs than a doctor. This allows the pharmacist to provide more detailed explanations to the patient. This extent of drug knowledge makes me feel more confident to learn from him. I prefer to learn about my drugs from the pharmacist.

The pharmacist should be friendly, casual, and not rushed for time. This type of personality makes me feel more at ease. I appreciate the value of a pharmacist now after my accident to counsel me on my meds. I seldom talked to a pharmacist before the accident. By the way, what is a druggist?

Before leaving the clinic, I always try to be sure I have no further questions about the drug. If other questions develop, I would call my doctor.

Motrin is a med which I take everyday. It helps to relieve the pain of my muscle spasms. It can also increase the amount of acid in the stomach and give stomachaches in the process. I do not know how it works but I do know when it works because my pain is less.

Thomas Tomkins (continued)

I would like to learn about any and everything about this drug since it helps me so much.

On this list, Colace is a stool softener. Milk of magnesia and Alka-Seltzer are used for stomach pains. Aspirin is great for headaches and hangovers. I have never heard of Zantac or Dibenz-whatever. I would like to know: Why I have to take the drug? What is the name of the drug (especially the Dibenz-one)? What are the actions, side effects, directions and market status (Is it experimental?)? The correct pronunciations of a drug are important and necessary for good communications with doctors and other health professionals.

AB = Ali Bliss

AB is a 19 year-old white female who suffered a gunshot wound in December 1984 which resulted in a T-10 paraplegia. Her hospitalization was complicated by a hemothorax and urinary tract infection both of which have since resolved. AB is a single college student majoring in French who plans to return to school in the fall.

My brother-in-law owns an ambulance service and mortuary. He is also a county coroner. My mother, sister and another brother-in-law are emergency medical technicians. Before my accident I visited my doctor 2-3 times per year for a physical and Pap smear. I always see my dentist once per year. I will probably see my doctor even more after I leave the rehab ward.

Health makes me think of a model who eats right and exercises regularly. She has her head on straight and is not crazy mentally. She participates in any activities of her interests. Actually a person's health bears no relationship to the activities she enjoys. An unhealthy person can still partake in his favorite activity to the best of his ability even if he can only watch it.

Whenever health questions develop, I usually ask one of the EMT's in my family. If I am still curious, my family has a medical encyclopedia, nursing and EMT books. If all else fails, I can go to the public library. If I was worried that I had a disease, I would want to call my doctor.

Health is an important area to study. A person needs to be informed on health in order to promote health. I am most interested in the areas of diet and exercise. Since my accident, I am more interested in my health now. I like to watch TV shows that deal with spinal cord injuries. That would have been a boring topic before but now it has a personal quality.

The PBS channel had a documentary on the brain once. It described a group of retarded people in Paris, France and the USA who had a disease which went untreated. Had these people received therapy,

they would not be retarded today. The HBO channel also has sexuality topics.

Mademoiselle, Life and Glamour are three magazines which I like to read. Their health articles deal with diet and exercise. The diets are usually exotic and expensive. Some require a person to buy fancy health foods to lose weight. A person's pocketbook will also lose weight! I believe in buying regular food like vegetables, fruit and shredded wheat. These foods have kept me in good health!

The Enquirer is not a reputable magazine. I have browsed through it but never have bought a copy. If a cure for cancer was really true, the national media would be broadcasting it so the world could know! I need more proof that someone was actually cured. This proof could come from a medical journal which describes a substantial experiment.

Health care is not an exact science. One doctor's fact may be another doctor's opinion. The outlet of a second opinion is necessary to satisfy curiosities.

When I go to the local grocery-pharmacy, I like to buy aspirin, cough drops, and Vicks Formula 44-D for colds and sore throat. If my symptoms of sneezing, scratchy throat and coughing last over two days, I will call my doctor. My parents never have recommended any home remedies other than simple aspirin for headache. I am not one to go out and buy new medications as they are put on the market. If I had a definite need, such as a terrible headache, and aspirin did not relieve the pain, I would consider trying the new product. I would try it after reading Consumer Reports and talking with my doctor.

Medications may be defined as an antibiotic which is used to treat infection such as a urinary tract infection; as a pain reliever to comfort a person with a headache; as an anti-inflammatory compound such as Indocin. Medications are not necessarily a cure, as in the common cold, but do offer a form of relief. Medications are not drugs. Drugs are found with street gangs who abuse them. Drugs are addictive too. Some drugs like morphine are legal to use in the hospital but can still be habit forming.

Vitamins are neither a drug nor a medication. They fall into their own vitamin category.

Medications are generally safe to use provided the tamper-proof seal has not been broken. I would definitely not use any aspirin with a broken seal which had green stuff growing on it.

If I thought I was getting a cold, I might consider the advice of my family or close friends. I usually follow my own intuition. I may try my friend's OTC pills if my own brand did not work. If she

Ali Bliss (continued)

was feeling rough, I would offer her my brand. I would never offer my prescription drugs to others or accept their prescription drugs. I might be allergic to their brand. My parents have drilled me since I was a child to never take or use other people's prescriptions. Over-the-counter drugs are more safe for the general public. People hear the names of OTC's frequently enough that they should be familiar with them. People should also know if they are allergic to these medications. If people are allergic to the OTC drug and die, that OTC drug cannot be sold as over the counter anymore.

Doctors diagnose ailments, prescribe a therapy or drugs to treat the ailment and do follow-up rounds on patients. Doctors should be competent and be able to admit when they are not truly sure about a definite diagnosis. Otherwise, the doctor can create a great deal of stress for the patient.

The rehab doctors spend about ten minutes discussing new drugs for me. We talk 2-3 minutes each day on old medications. My family doctor usually spends 1-2 minutes talking about a new prescription. The conversations are generally interesting. I enjoy hearing about my positive attitude and progress. I like to hear about my goals which I have accomplished and those goals which still need attention before my discharge. Many doctors think they can just push me around. If I have any questions, opinions or cannot understand terms, I will make sure they stay to listen to me.

Pharmacists tend to be more helpful than doctors in medication education. Doctors only tell the use and action of a drug and how long I will have to take it. Pharmacists provide more detailed information by discussing the use, side effects, precautions and the importance of this medication for me. The pharmacist fills the prescription written by the doctor and types up labels too. They provide detailed medication sheets to help the patient remember vital facts about his drugs. The doctor is just as qualified to talk about drugs since he prescribes them but the pharmacist provides more details due to his active working knowledge of the drugs. Doctors do not discuss detail because they are too busy with other physical problems.

The qualities that I like to see in a pharmacist are a trusting attitude, an ability to listen to patients and answer questions, a kind understanding, and able to refill birth control pills without embarrassing the patient. I refill mine every month so this is important to me.

The term druggist sounds like a drug dealer but I believe it refers to an old-fashioned term for pharmacist.

Tylenol No. 3 is a drug I am very familiar with since I use it for severe headache and back pain. It acts by making me drowsy so I

Ali Bliss (continued)

sleep and cannot feel the pain. I feel very satisfied with my knowledge of this drug but would like to know why it is called No. 3 and not No. 2.

On the given list, aspirin is used for headaches and cramps. Alka-Seltzer is used to treat hangovers and upset stomach. Milk of magnesia treats diarrhea. Colace is a stool softener. I do not know what Zantac or Dibenzyline are used for. If I had to take one of those last two drug, I would like to know: What is it? Why do I need to take it? Is it used to relieve spasms? What are the side effects? Will it leave me drowsy? What are the directions? Is it addictive? What is the name of the drug? Names are important because if a person with allergies is involved in a car wreck and is given a drug which he is allergic to, the person may die. Knowing drug names also improves the communication between the patient and the doctor.

PD = Paul Davis

PD is a 26 year-old white male who was involved in a telephone installation accident in September 1984. This resulted in burns over 10% of his body with quadriparesis and seizures. His hospitalization involved numerous skin grafts to close a scalp wound, amputation of his left third digit and seizure control monitoring. PD is married and has one child.

The only person in my family who has ever worked in the health field is my wife who is a dental hygienist. Before my accident, I would only visit my doctor once a year for a physical exam or to get a hay fever prescription.

Health is an important topic although I have not weighed it very heavily in the past. Health is a state of general physical strength and being able to walk. When people are involved with jobs in health care the entire population benefits especially in the emergency situation.

If I ever needed information on a strange disease that interested me, I would refer to a general medical encyclopedia which my mom owns. If I needed further information, I would go to the public library. If I knew that I had this disease, I would visit my family doctor since he has more expertise than I do.

Besides reading library books, a person can learn about health by watching the TV educational channel. One show which I watched, involved the brain and its various functions. The pathways which impulses follow were shown as well as how these impulses affect the various functions of the body. This show had a lot of personal application for me since I have seizures. Another show talked about the importance of a proper diet and regular exercise to promote good health. Salt Lake is supposed to have a health

Paul Davis (continued)

channel on the cable network but I have never watched it since my family does not have cable at home.

My personal library at home does not include any medical books but I do buy a magazine called Mother Earth which has nutrition articles in it. Some of the organic recipes taste very good and are full of natural fiber and fruits.

Some people might consider The Enquirer a good source of medical information. I consider it as pure trash. These papers are strictly for entertainment. Common sense says they have no value. If their discoveries were true, the medical journals and national news media would be spreading the good news. Cures for cancer and arthritis are big business and big news. Those trash papers would not be even able to answer any of the technical questions that would naturally come with this big news. When people read these articles, they should naturally question the credibility of the article.

Since so much information about health is available, a person has to keep in mind that health is not an exact science. If it were an exact science, there would not be so many views to describe it. Medical doctors who are trained to know about health and the body do not know all the answers and can easily make a mistake. A person may have a very special problem which requires a specialist doctor.

When I am sick I usually treat common symptoms like a runny nose of a cold with aspirin and antihistamines. I will only call my doctor if I know I will miss a day of work. If I ever miss work, I am really sick!

My medicine cabinet is stocked at home with Tylenol, Rolaids, Visine and Contac. I learned about these products mostly through advertising. My kitchen is stocked for making chicken noodle soup for any symptom that appears. My mom was great for chicken soup!

Health foods are really not necessary to survive. A person only needs to balance his diet with the five basic food groups.

People have to be careful when they buy these new over-the-counter drugs. The ads on TV can be misleading sometimes. Nuprin which is like Motrin is supposed to be as strong as two aspirin tablets. I will not buy a new drug unless I know it is endorsed by my doctor and the American Medical Association. A medication is a legal drug which is used properly to aid the body in regaining its health. The term 'drugs' is a broad category which includes medications. Street drugs are illegal and highly abused. Vitamins are neither a drug nor a medication. They are just vitamins and have their own class.

Paul Davis (continued)

When medications are placed on the market they are safe to use. These medications have been tested thoroughly by the FDA which is the Food and Drug Administration. The 'Tylenol incident' really scared me because this product was used and trusted by my family. The repackaging strategy helped to reassure me of its safety.

When a cold is coming on, I make the soup and take aspirin or antihistamines. I generally follow my own advice since getting a cold is nothing new. If I did have a question, I could always call my neighbor who is a nurse. If she recommended an over-the-counter drug, I may consider buying it. If I found it to be helpful, I would pass the word on to another sick friend so he could buy his own supply.

Doctors or 'M.D.'s as they like to be called' are responsible for making a diagnosis of a physical problem, for prescribing medications and operating on injuries when necessary. They are underworked and overpaid. Nurses do 95% of all the work. The patient sees the doctor possibly 10 minutes of the entire day if he is lucky. The doctor receives all the credit. About 3-4 minutes of this 10 minutes is spent on medications. Some of the residents do all the talking and then leave and I really wonder if they even care about me.

My discussions with the physicians are too brief. I am interested in my care and want to learn more about my medications. The doctors act too busy to explain possible side effects which I might experience. No drug is without a side effect! My family doctor handles the situation entirely different. He goes out of his way to keep my family's general welfare in mind. He sends us literature on pertinent health problems. This personal touch really adds a wonderful warmth to our relationships. This is the key which many doctors lack.

My family visits the neighborhood clinic's pharmacy for refills on family prescriptions. The pharmacist is an older gentleman who is extremely helpful. If I have any symptoms he will quiz the problem further to see if I should possibly see our doctor. He suggests good OTC products for coughs and colds. When buying a prescription, I ask him questions on generic drugs. He tells me about any differences between the generic and brand names.

Here in the hospital, the nurses have been the most helpful to tell me about my medications mainly because they are so accessible and easy to talk with. They usually tell me the side effects which are commonly seen with my drugs. I would not be so persistent about side effects but I sometimes think that the doctors do not want the patient to be fully informed. The doctors only state the name and dosage of the drug which does not satisfy my needs.

Paul Davis (continued)

Dilantin, which is also called phenytoin, is the drug which I take to control my seizures. I take 350 mg each morning and 300 mg each evening by mouth. I only know that it works in the blood stream. What I would really like to know is: How does this drug work in the brain to control seizures? Does the body make a substance similar to Dilantin to prevent these seizures normally?

On this list, aspirin is used for headaches and body aches; milk of magnesia and Colace are used to aid constipation; Alka-Seltzer treats upset stomachs. I have not heard of Zantac or Dibenzyline. If I had to take one of those last drugs, I would want to know if the drug interacts with any of my other drugs; what are the common side effects; how do I take it. I would like to learn about my new medications from the doctor since he initially prescribes the drug and knows the current state of my health. Doctors do not fulfill their medical obligations to their patients.

RS = Rodney Shelka

RS is a 41 year-old white male who was involved in a high voltage powerline accident in November 1984 which resulted in a T-8 paraplegia. His hospitalization was complicated by a urinary tract infection, pneumothorax and a pulmonary embolism after have surgical placement of Harrington rods for stabilization. RS is married, the father of five children and works as a property manager.

My family is not very oriented toward the health professions. I have a cousin who instructs chiropractors on office management techniques. I have always been a healthy person even before my accident. The only time that I would visit the family doctor was to take one of my children for ear infections or the childhood illnesses like chicken pox.

Health means to lack illness. Health is a personal interpretation or a personal state of mind for the tolerance of symptoms. I am healthy and may have symptoms but they do not bother me. If the symptoms begin to bother me then my health has acquired a different tolerance level. Illness can be psychogenic. My mom describes her pain as 'excruciating' or says that she is 'on her deathbed'. I find it hard to know when the pain is genuine. My folks mentally propagate their illnesses. They do not understand that aches and pains can be just aches and pains and nothing more.

Good health practices are important and should be taught at home and in school. People should learn the importance of moderation to prevent the proliferation of fat people on this earth. Carrying around an extra 100 pounds of fat is not healthy.

If I ever have a health question, I usually ask our family physician. Many of my questions are answered in the magazines which I buy such as Boating, Sailing, and People magazines. I

Rodney Shelka (continued)

enjoy reading about techniques to save lives in boating accidents, drownings, and updating the first aid kit. If I ever had a health question that involved me personally, I would again talk to my doctor who would have to diagnose the problem anyway.

Television has never been a favorite past time with me. Any documentaries usually involve certain illnesses. I prefer to hear about new medical discoveries and breakthroughs.

My opinion of The Enquirer is not very high. I have only read a few of the articles which I found to have twisted themes and sensational facts if you dare even call them facts. The articles rarely have any relationship to the titles. If the discoveries are so vital, why have they not been broadcast in the national news media? I need a second source to verify these articles before I will believe them (such as a medical journal or famous doctor). If I want to know facts about law I will visit a lawyer. If I want to know facts about health, I will ask a doctor...not a yellow newspaper.

My family owns a three-volume health encyclopedia. I have never read it. Books about chess never change but health is a constantly changing topic. These encyclopedias are probably already outdated.

Aspirin and cough syrups are the only medications my wife and I keep on hand for the cold, sore-throat, runny-nose season. We also buy a multi-vitamin at the local grocery-pharmacy store. If I develop extraordinary symptoms such as a swollen face I would call my doctor.

When new medications come on the market there is a tendency to try new products. I may try the product if I had a definite need for it. If Contac, my old standby, was not helping my cold I would probably try the new medication.

Medications are oral or IV drugs which are man-made to cure a specific illness. I am unsure if herbs are medications. All medications are drugs. Vitamins are neither medications nor drugs. They do not provide a specific cure. A person does not supplement their body with penicillin but does do so with Vitamin C.

Medications are safe to buy over the counter if the consumer follows the directions properly. A medication would not be safe to buy if the product such as aspirin looked green and hairy.

Since I am a big boy now I generally follow my own advice when I feel ill. My wife sometimes has good suggestions which I may follow. If a good friend told me a drug worked wonders for his specific symptoms I may consider trying it after deciding that my old standby was not helpful. If his drug was a prescription product I would not even consider using it since it was prescribed especially for his needs. If my friend was in dire need of a

Rodney Shelka (continued)

medication for his cold I would offer him one of my OTC remedies if they were handy, otherwise he would have to buy his own.

Doctors interpret symptoms and make recommendations to the patient to take pills or have surgery performed to correct ailments. Doctors also discuss medications which the patient will be taking. My family doctor spends about 5-10 minutes discussing a new prescription. The rehab doctor spends anywhere from zero to very little time on medication discussions. The nurses spend more time talking to me about my meds than the doctors do. The doctors only describe what the drug will do inside my body and the directions for use. The pharmacists have been no better. They hand the prescription bottle to me, state the directions and the number of pills, say thank you and leave. I know that the pharmacist has an important job on assisting the follow-up of a doctor's recommendation, checking for drug interactions especially when different doctors may be prescribing totally different drugs, and providing drug information to the doctors. What about the patient? I am the one who has to take the drug and would like to know more about these meds! Doctors and pharmacists do not make personal visits to the bedside. Most of my questions arise when I have to take the actual drug from the nurse. Since the nurse is present, I usually ask him or her.

My brief discussions with the doctor provide enough time to ask questions. The language has always been easy to understand but the physician's handwriting is another story!

A pharmacist is the same as a druggist. The latter term is just more old-fashioned. Did you know that in the very old days the drugstore used to be called the apothecary?

Medications which are contained in blister packs such as Contac are not always safe to use. I usually keep a pack in my first aid kit. Each blister though is not labeled. If a person has several types of blister packs in the first aid kit severe accidents may occur. I usually just flush those drugs which I am not sure about at the end of boating season.

Aspirin is a drug I commonly use. I cannot use it now though because it interacts with my Coumadin dose and raises my bleeding times too much. I take as few drugs as possible. My dad is just the opposite. He uses herbs and reads about them in books. He is not a health food nut...just a walking drugstore. He reminds me of a witch doctor. I don't listen to him because I don't have enough needs to satisfy his suggestions. He can go to a chiropractor three times and think that he knows the science well enough to practice on other people! My dad also says that 5000 units of Vitamin C five times daily will keep the colds away. My folks take each ache and pain very seriously.

Rodney Shelka (continued)

On this list, aspirin is a pain reliever; Colace is a stool softener. The rest are foreign to me probably since I use so few medications. If I was told by my doctor that I would have to take Zantac I would want to know the reason for its use; what will the drug do once it is inside my body; what are possible side effects I can expect to occur. Knowing the name of a drug is important for the patient. It aids identification of the drug especially in the case of look-alike drugs.

PF = Penny Fisker

PF is a 24 year-old white female who was injured in a motor vehicle accident in January 1985. Her injury consisted of a T-12 fracture which resulted in a complete paraplegia. After spinal stabilization procedures, her hospitalization course was uneventful. PF is married and worked as a cosmetologist prior to her accident.

My mother who is a registered nurse is the only person in my family who works in the health care field. I usually see my family physician two times during the year for my annual checkup and Pap smear.

Health refers to a state of feeling good. Rest, exercise and diet help a person to keep their good health. Every person is an individual with individual needs. Varying amounts of rest, exercise and diet will meet the needs of these people. I have to take extra care of my lungs to prevent pneumonia. My diet has to be well balanced. During the first year after an accident such as mine, the bones release a lot of calcium into the bloodstream. Too much calcium can deposit in the kidneys and form stones. Other people may suffer from arthritic joints.

Health topics do not excite me very much. I may go to the public library to read on a disease topic of interest. I would be more interested if I unfortunately had the disease. If that happened, I would visit my doctor! Reading too much about health can be unhealthy! People can actually start to experience symptoms which they do not have!

Health shows on the TV are usually changed to a different channel. I do like to watch the Twenty Minute Workout on the TV in the mornings. This show has similar topics that a person can read in Glamour and Mademoiselle. These magazines have articles on diets, importance of diet in cancer, protein contents of diets, exercises, skin and nail care, and proper hair management. Hair and skin care are important health topics because they promote proper personal hygiene. People do not really know enough about the diseases which are transmitted by contact such as impetigo, ringworm, and body lice.

Penny Fisker (continued)

Some people place a lot of faith in the health articles in The Enquirer. I have never bought a copy but I have browsed through copies at a friend's house. The articles are interesting but not documented for credibility. They are very incredible! The people who write those articles are not qualified in the health area to write such articles. Interestingly, the claims which are made in these newspapers are never followed-up in the medical journals.

Questioning the health information which a person hears is important because people can mix their facts up so easily. Some doctors may interpret their opinion as being the answer when in reality no true answer exists. If this occurs, the patient should seek second opinions to investigate all avenues open to him.

The only health references which I have been exposed to are the various nursing books which belong to my mother.

Whenever I have a cold I usually use lozenges for my sore throat and antihistamines for my cold. My mom's honey and lemon combo is also good for a sore throat. If fevers develop I usually call my doctor. My mom also has Dristan, Sine-Off, Nyquil and Sucrets which I may also use depending upon my symptoms. I tend to use the products which my family has used for years. The TV ads can also be a big influence to buy these products. I can relate to the person on the ad with a red nose and scratchy throat. Besides knowing which symptoms the drug will treat, I also like to consider the number of times during the day I will have to take it. Prices are also an important factor.

Some people feel that health foods are the only way to promote good health. I believe that a person only needs a balanced diet with vegies and meats. People survived on balanced diets long before the health foods became popular. Health foods are very expensive and a person only pays for the name.

Medication is a prescribed or over-the-counter medicine to cure, prevent or relieve illness. Medications are a subcategory of a larger group called 'drugs'. Drugs also include illegal use of dope such as marijuana and LSD. Vitamins are also described as a type of drug. Anything taken through the mouth in a pill form is a drug and has the potential for misuse.

Medications are generally safe to use provided the seal has not been tampered with before the purchase. If the person used alcohol or takes other drugs, the use of over-the-counter drugs may not be safe due to the possibility of drug interactions and allergies. The tamper-proof seals and extensive FDA testing reassures the consumer that these products are safe to use.

When I am ill I usually follow my own advice. It can be nice to consider the helpful hints that family or friends may have on how to feel better.

Penny Fisker (continued)

If my friend recommends that I try her OTC med to relieve my headache or my cold I would probably go out and buy it especially if my remedy was not helping me. I feel confident using OTC drugs because I do not have any allergies. My friends may use my OTC meds if they demonstrate a genuine need. I would never let them use my prescription drugs. Prescriptions are a personal thing like a contract between the patient and doctor. My folks have always told me to never use other people's prescription medications. If a person is so sick that he needs a prescription, he should see the doctor.

A doctor uses knowledge to help heal ailments; he provides comfort, answers questions, does surgery, prescribes medications or specific therapies. Doctors may specialize in specific areas which would make their responsibilities even more defined. My doctor usually spends five minutes with me discussing medications while the pharmacist spends at least 15 minutes with me.

My visits with my doctor are interesting. I enjoy asking questions and listening to the answers. The doctor is not a very interesting person when it comes to discussing my medications. I usually do not learn that I will be placed on a new medication until the nurse brings it to me! The pharmacist has been extremely helpful to me by telling me that I will be taking another new medication. He types up the label directions for me which are easy to understand. He educates me on the proper directions, name of the drug, side effects and possible interactions that may occur with other drugs or foods. I really like to learn these details. I feel more informed on my own health care. The pharmacist usually has the medication in-hand and this stimulates me to ask even more questions. He even provides me with a medication education sheet which is handy to read over and review. The doctor may have the ultimate responsibility of prescribing the drug for the patient but the pharmacist is responsible for the education of that patient to ensure that the patient takes the drug. What good is a fancy drug if the patient decides not to take it? As you can tell, I'd rather learn about my medications from the pharmacist. Pharmacists are specialists and require at least four years of school. A good pharmacist is pleasant, attentive to the patient's needs, comfortable to talk to, and has a gift of gab. By the way, a pharmacist was called a druggist in the old days.

If I had questions on a medication when at home, I would most likely call my family doctor since I know him personally. I do not know any pharmacists back home.

Tylenol is a drug which I use frequently for muscle pains and headache. It works by expanding the blood vessels in the head to release the tension. I know when it is working because the pain becomes less and less. I am very interested in learning about this drug's side effects.

Penny Fisker (continued)

On this list, aspirin is used for headaches; milk of magnesia and Alka-Seltzer are used to treat stomach aches; Colace is a stool softener. Zantac and Dibenzyline are not familiar to me. The most important questions to ask while on a new drug such as Zantac are: Why do I need to take it? What is the action of the drug? What are possible side effects? How long will I have to take this medication? Knowing the names of the medications which a person takes is very important. Being able to pronounce the names is not as important as being able to write them on paper since some people may pronounce the names differently. This may prevent serious drug interactions during an emergency situation.

TA = Tim Ashley

TA is a 29 year-old white male who experienced a fall from a tall ladder which resulted in an incomplete C-6 quadriplegia in September 1983. He was recently admitted with nausea and chills and treated surgically for kidney stones. His recovery was uneventful. TA is a high school graduate and married. The couple have no children.

No members of my family work in the health care field. Before my accident, I saw my family physician annually for a physical exam. Now I see my rehab doctor four scheduled times per year provided no other symptoms develop in the meantime.

Health is made of two parts: mental and physical health are intertwined. A healthy mental attitude consists of a good mind which thinks positively. A healthy body is promoted through balanced foods and exercise. Health is an important topic to study. Health courses teach the individual how to be more conscious about symptoms. Health courses also detail the types and amounts of exercise and diets. Everything should be done in moderation.

If I became interested in learning about a new disease I would call a medical doctor in that specialty who could send me brochures or refer me to a special institute which deals with the disease on a more daily basis. If I had the disease personally, I would want to work closely with my doctor to determine if I needed extra tests or hospitalization.

Besides taking health courses, a person can watch the Life Time health program on the cable network. The PBS channel also shows special operations which are interesting. Some of the talk shows also have pointers for good diets and sex education. Reading magazines such as Sports Illustrated can also give a person some good ideas on proper exercise routines. The university does much research too. The various departments always have interesting information to read on the artificial heart and ear.

Tim Ashley (continued)

The Enquirer is an interesting newspaper to read. A person should approach all medical discoveries with an open mind. The different discoveries are bound to help someone. I still would like to read more about the original research. All the health information which we hear nowadays has pros and cons which must be balanced and weighed to determine benefits and risks. Obtaining second and third opinions can help a person decide on what these pros and cons may actually be since the answer may not be cut and dry.

My family does not own any health-related references other than a regular encyclopedia which contains many health-related topics.

When I become ill with a stuffy nose I usually use Contac and aspirin. I treat coughs with Triaminic liquid. Sometimes fever can be broken faster with Tylenol. If my cold symptoms did not clear after three days, I would call my doctor for suggestions. Most of the various over-the-counter drugs were introduced to me through my parents or by just shopping the drugstore. If a friend found that a new OTC drug helped his aches and pains or whatever faster than a product which I was using, I may be tempted to try the new OTC when the need arose again.

Balanced diets are necessary to maintain good health. The health food stores which sell fancy health foods are not really necessary. The vitamins which are found in the health foods are also found within the four basic food groups of a balanced diet.

Medications relieve the symptoms of illness. Some medications even help those with emotional problems to cope with life. Medications are included under the broader category of 'drugs'. Medications can be OTC or prescribed by the doctor. Street drugs are not medications due to their addictive qualities. Vitamins are not medications but are drugs due to their synthetic nature. All drugs are man-made.

Medications are safe for the public to buy because the FDA has passed these medications through various stages of testing for safety. Any medication can be used improperly to cause an overdose. If a person has an unknown allergy, the medication may be unsafe for him personally.

When a person feels sick, he should take his own advice since he knows his symptoms better than anyone else.

The doctor diagnoses various physical and mental problems. He may prescribe drugs to treat the problem. The doctor usually tells the patient the name of the drug he is going to prescribe along with its action, directions for use and how long the patient will have to take that drug. I enjoy hearing and learning this information from the doctor as well as how this drug will benefit me personally. If I do not understand a part of the conversation, I will pester the doctor until he answers my question fully.

Tim Ashley (continued)

Pharmacists or druggists fill prescriptions according to the doctor's wishes. They work with the doctor to be sure that the correct drug is given to the patient. The pharmacist also knows about other drugs which may interact with the new drug and should therefore be avoided. The pharmacist is better prepared to tell the patient about his medications due to his extensive education background. I feel he is more prepared than the physician. In my experience, the pharmacist has only explained the actions of medications. The doctors tend to be more readily accessible than the pharmacists on the rehab floor. Since the pharmacists are not available for answering questions, I have relied on my doctor to answer questions. I tend to ask my doctor questions even when the pharmacist is present because of our special friendship. The doctor seems to sense when I have difficulty understanding a part of my therapy and I appreciate this personal touch.

Although hospital and retail pharmacists have the same amount of knowledge, the rehab floor has a special pharmacist who is well-tuned to the medication needs of her patients. She provides me with med bottles which are easy to open (Opening simple bottles can be a very frustrating experience!) and a medication education sheet to review my meds. I learned most of my medication education from her spinal cord injury course. Her role on the rehab floor is the same as a hospital pharmacist except she visits the patients on rounds and spends more time with the patient teaching.

When I am not in the hospital I usually refill my prescriptions once monthly here at the University for insurance purposes.

Since I have been on my medications for such a long period of time, I feel that I understand them well. When I come into the hospital for treatment of a urinary tract infection, I sometimes have to remind the residents of the proper use of these drugs. I had to remind a resident recently that my Macrodantin should be discontinued if my UTI is being treated with the current antibiotic.

Dibenzyline is a drug well-known to me. It is used for bladder control. It relaxes the bladder sphincter so spinal cord injury patients do not experience 'back-up' from the bladder. If this drug does not work properly, my bladder becomes distended. I was never told that this drug had any side effects. Are there side effects I should be aware of?

All these drugs are familiar to me except Zantac. Aspirin is used to treat headache. Milk of magnesia aids people with constipation. Colace is a stool softener. Alka-Seltzer relieves upset stomach. If I was prescribed Zantac, I would want to know: What is it? What are its proper directions, length of use, toxic dose, and action in the body. I prefer to learn the basic medication information from my doctor since he does know some basic drug

information. Once I have learned this, I would like to talk to the pharmacist to supplement my knowledge.

RP = Rita Panner

RP is a 27 year-old white female college student who was involved in a motor vehicle accident in August 1984 which left her as a C-6 quadriplegic. After surgical stabilization, RP's hospital course was uneventful.

My sister is a dental assistant and my aunt is a retired registered nurse. No other members of my family have occupations in the health field.

Health is a state of physical and emotional well-being. I have been a healthy person all my life. I may visit the doctor once a year for a physical exam. Being healthy allows a person to participate in many types of indoor and outdoor activities. Health, though, is a state of mind so a person can still enjoy his favorite activities even if he can only watch.

If I became interested in a special disease I would call my doctor to listen to his information. He would probably refer me to other sources of information such as an institute or foundation which works with the disease. If I had the disease I would want to stay in close communication with my doctor since he would have been the person who diagnosed it anyway.

Learning about health helps a person to stay healthy by knowing about better ways to live. Health courses can teach a person better habits in personal hygiene and exercise routines. Depending on the area of health which is studied, a person can be exposed to new areas of research such as the artificial heart program.

My interests in reading have generally involved accounting topics and not health care. I have never read those newspapers at the grocery check-out stands. I have read the covers but not the articles. The articles may have some good scientific information but I really cannot give my opinion.

Questioning health information is a good thing especially when the ideas do not sound logical. If you have never heard of the new information, asking other people (friends, family, doctors) may help you to sort your thoughts.

Second opinions are a good option to have available. Medicine is not a one-way street. Many doctors may have many ideas on how to treat one problem. Getting a second opinion may help expose all possible options open to the patient.

My family owns a set of medical encyclopedias at home which are helpful too.

Rita Panner (continued)

The only time I consider treating myself is when my symptoms prevent me from carrying on my daily routines (such as a bad bad headache, nausea or vomiting). I usually use aspirin or a sinus medication for colds and headache. If my stomach hurts, I usually lay on it after taking Pepto Bismol. My mom recommends hot lemon juice for a sore throat. Most of my remedies were learned from watching TV and listening to my mother. I would definitely call my doctor if my treatments were not helpful.

Health foods are not necessary for maintaining good health. Healthy foods, though, are necessary for maintaining good health. This means that a person should eat a balanced diet every day for good nutrition.

A medication is a drug and is used in a pill or liquid form to cure symptoms. Vitamins are also medications which provide nutrients to the body.

When new medications are advertised, I usually do not buy them because I just do not take any medications. If my old sinus medication no longer helped my sinus symptoms, I would consider buying the new sinus product.

Sometimes when I am sick I do not feel like treating myself because I just want to be sick (as in too sick to even move when the flu season hits). When this happens I like to hear the advice of my family and friends since they know me and my habits. Before my accident, health was never on my mind because I unknowingly took it for granted. Life is health which is precious.

Whenever I discover an OTC medication which is helpful to me, I usually tell my friends to consider trying it if they ever develop certain symptoms. They would have to take the initiative to learn about the drug. I would consider their advice only if I had heard of the drug and had my doctor's okay.

Doctors provide health care to patients. They have the authority to give orders to the nurses since they have more education than nurses. The doctor spends time with each patient discussing medications and the patient's progress. My doctor usually spends 5-10 minutes discussing the action of a new drug, and the types of side effects which may occur. Sometimes the doctor may spend 15 minutes talking about my entire medication program. The conversations are interesting and the doctors stay at my bedside to answer my questions. I feel my questions are answered to my satisfaction and understanding.

The pharmacist tends to have more knowledge on medications than the doctor. The pharmacist is a source of drug information who provides information and the medication to the patient. I would rather learn about my medications from the pharmacist because she shows a definite interest in helping the patient. She is easy to

Rita Panner (continued)

understand and provides more detail than the doctor on my meds. Because of the pharmacist's expertise in drug information and preparation education-wise, I feel more confident in my ability to learn from her. If the pharmacist was ever unable to answer my questions, I would call my doctor since he prescribed the drug to begin with and has my health records.

Mandelamine is a medication which I use four times daily. It makes my bladder more acidic to prevent urinary tract infections. I have never learned that this medication has any side effects to be aware of.

All these medications are familiar to me except Zantac and Dibenzyline. If I had to take either of those drugs I would like to know each drug's side effects, its action in the body, and the special reason why I need to take this medication. Aspirin is used to relieve pain. Milk of magnesia is used to treat diarrhea. Alka-Seltzer relieves sour stomachs. Colace is a stool softener.

PFr = Patty Frazier

PFr is a 29 year-old white female who was injured in a shooting in 1972 which resulted in a C-5 quadriplegia. She remembers that the injury required ten weeks of intensive care treatment with chronic respiratory care. PFr completed her high school education and one year of college. She would like to work as a rehabilitation counselor.

My family has two cousins who are nurses. One is a registered nurse and the other is a practical nurse.

Since my injury occurred such a long time ago, I cannot really remember how often I saw my family doctor. I visit my rehab doctor 2-3 times per year. I may call my family doctor once a year to get a cold prescription.

Having good health means that a person is healthy! If I was a healthy person I could get out of my chair and walk outside (even in the cold weather) and visit friends. Health is an important area to at least be aware of. Being aware of my health allows me to know when symptoms like colds, fevers, and sore throats can make my body feel tough. Hygiene is another important area. Proper skin hygiene is necessary for me to prevent skin ulcers from developing and keeping me down for weeks and weeks.

When a health question comes about I usually want to read about it in the medical books at the public library. If I had the disease in question, I would want more expert advice from my doctor on its proper treatment. He could then refer me to other sources of information.

Patty Frazier (continued)

Channel 11 which is the BYU channel has spinal cord injury shows sometimes. The shows discuss ongoing research which will benefit paras and quads. I also like to read about different human interest stories about the handicapped in newspapers. One story discussed the implantation of a dime-like material in the body to help a spinal cord patient walk again. I find this information very interesting because it gives me hope. Newspapers like The Enquirer do contain health information but I never read any articles.

Questioning health information is important because it allows a person to decide on the pros and cons of a topic to better understand the information. Obtaining a second opinion is a form of such a question. It gives the patient more confidence in the doctors and the decision when that decision is unanimous. One doctor wanted to cut my toes off because of circulation problems. I asked another doctor what his opinion was and I still have my toes today!

Tylenol is the only medication which I use for colds and headaches. I buy it at our neighborhood pharmacy. If my symptoms developed into a pneumonia picture with a tight chest and difficulties breathing, I would call my rehab doctor immediately. My mom also has some good recipes to brew up when I am ill. We make hot toddies with lemon, honey, boiling water, ginger and a shot of whiskey. It puts me right to sleep. Raw lemon with salt is also good to decrease mucous production and heal a sore throat. Gargling with vinegar and salt has a similar effect.

Carob is the only health food product that I like to buy. It is like a type of chocolate made from cow's milk. It has less calories than real chocolate and has tons of vitamins. It is a natural product and has no preservatives. I learned about it from a girl friend. Health foods are interesting to try but it is an individual's choice. Eating health food is not as important as eating healthy food. The food which is grown on farms really has no vitamins because of all the chemicals and fertilizers which are placed in the ground. The soil is not pure anymore. If food could be grown in a totally natural environment to ensure this vitamin content, our diets could be considered healthy.

When new remedies or methods for cure are developed, I would like to try them if I thought I may benefit from it. New research is being done to control spasms by using electrodes. I would like to be in the study for it.

Medications are pills that help relieve a person's symptoms. Medications do not require careful control like drugs. Drugs require special records to keep order on the narcotic file. Medications like aspirin and Mandelamine do not require these types of records. Vitamins are also medications which do not require tight control.

Patty Frazier (continued)

Due to all the tampering that goes with over-the-counter medications, I am scared to take them. The tamper-proof lids do give me some security.

If the medication has not been tampered with, it may still be unsafe to take. If a person cuts his toe, aspirin may make him bleed to death. Taking aspirin on an empty stomach can also cause a lot of stomach distress.

When I am ill I usually follow my own advice which is to check with my doctor. I am very susceptible to pneumonia and the doctor may want to give me an antibiotic.

New medications should not be tried by anyone unless they know they are not allergic to the drug. I have a lot of allergies and have to be careful with the side effects of drugs.

Doctors have a very high amount of knowledge. They talk to patients to discuss physical problems as well as the effects of medications. My doctor spends about 20 minutes or longer discussing my medications. I learn about side effects, drug action and the reason why I have to take the drug. I always have time to ask questions and enjoy listening to the answers.

The pharmacist is the drug expert. I would rather learn about my medications from the pharmacist because then I can get the whole story since he can answer my questions quickly. He is easy to talk to and I think he likes to hear my questions. The pharmacist is best prepared because of his extensive drug education. He is friendly, willing to talk, makes me feel at ease and keeps no information from me. I like to hear about my drugs in detail. The pharmacist uses language that is very easy to understand. The interns have great problems in this area since they cannot communicate very well to the patients.

Lioresal is a drug which I use a lot. I take 20 mg four times a day. It acts to decrease muscle spasms and relax my muscles. A person should not take more than 80 mg daily since more drug will not necessarily do any more good. When I started to take Lioresal it had just been released on the market. The only side effect reported back then was pimples.

On this list, aspirin is used for headaches. Milk of magnesia stops diarrhea. Alka-Seltzer helps relieve a cold or upset stomach. Colace is a stool softener. The other two drugs I cannot even say the names! If I had to take one of these last two drugs, I would want to know the reason for using it, side effects and details, details. I would have a chat with my pharmacist. Knowing how to say the names of personal medications is important to prevent mistakes at refill time.

IA = Iris Alzmier

IA is a 74 year-old retired widow who experienced a right cerebral vascular accident in October 1984 which resulted in left upper and lower hemiplegia. Her course on the rehab ward has been uneventful. She is currently receiving extensive physical and occupational rehabilitation therapy.

My family has occupations in other areas than health care. My distant family also does not work in the health field.

Before my stroke, I would go to the doctor's clinic once every two months for small physical exams and to check my heart medications. I am not sure how often I will have to visit my doctor when I leave this hospital. I rely on my doctor because I do not have any health books at home.

Health is the condition of the body to withstand forces such as illnesses. A healthy body can withstand anything. A healthy person can exercise, work in the house or even work in the yard.

If I was learning about a disease I would call my doctor and he might recommend some other types of information to me. If I personally had the disease I would definitely call my doctor in the same way.

Television health shows are rather boring. We do not have cable. I am more interested in reading my LDS church magazine and my cooking magazines. The recipes deal alot with cooking balanced meals for the family.

Those newspapers like The Enquirer have health articles which are very exaggerated. Scandal is used to promote these articles. I would need more proof to believe this information or any health information which I hear.

When I am not feeling well I call my doctor since he is so familiar with my condition and has my health records handy. He is my friend and takes my word on anything. I do not even buy any over-the-counter drugs at the store. I will not use any medications unless my doctor tells me to do so.

Eating health food is an individual's choice. I personally think they are too expensive. Since they are not prepared by doctors, health foods probably are not very healthy to eat. I believe in eating a balanced diet.

Medications are pills or medicines that are prescribed by the doctor. Drugs are the healing components which make up the medication. Genuine medications include nitroglycerin for heart angina for example. Aspirin and Tylenol are not medications because the doctor does not prescribe them. Vitamins are not drugs or medications because the doctor again does not prescribe them. Aspirin, Tylenol and vitamins are only safe for a person to use

Iris Alzmier (continued)

when the doctor writes for them. People should also not use other's medications since they were not prescribed. My body acts adversely to many medications. I took aspirin once for my arthritis by my doctor's order. I became very disoriented, crazy, and did not know where I was! People must be careful.

A doctor recommends cures for physical problems and makes the patient feel better. He is a patient person who tells the patient to take his pills every day until gone, actions of his medications as well as side effects. My doctor usually spends 30 minutes talking about my drugs. I feel so dumb that I cannot remember the long drug names. I wish the names were shorter. I enjoy my conversations with the doctor and find the information educational. He does not give me any written information.

Pharmacists only fill the prescriptions which doctors write. I have not seen any pharmacists in this hospital. I do not think that my medical team even has one. I prefer to learn about my medications from the doctor since he knows everything.

Pharmacists are generally cheerful, cooperative, eager for my business and efficient so they don't waste my time. Once in awhile in the drugstore, the pharmacist will take time to talk to me. He usually tells me something special about my prescription like not to drink milk with it. My only need for a pharmacist is to refill my prescriptions.

Nitroglycerin is a drug which was prescribed by my doctor to treat angina. It opens the pores to increase blood flow to my heart. It does not have any side effects. I know when it begins to work because I do not feel anymore chest pain. I know that nitroglycerin can blow things up in an explosion and I would like to know more about this.

On this list, I do not know who or why a person would use these products. I never buy over-the-counter medications. I have never heard of Colace or Zantac or Dibenzyline. If I had to take one of these drugs I would like to know: What is it used for? How long will I have to take it? What are the directions for use? What are the side effects? If I know this information, I feel more comfortable to take the medication as prescribed by my doctor. Since my stroke, though, I find it especially hard to remember my drug names and why I am using the drug. It is so frustrating for me! Hopefully things will improve in time.

VR = Vera Randell

VR is a 59 year-old white retired female who was diagnosed with a diffuse demyelinating polyneuropathy of unknown etiology leading to quadriplegia in September 1984. Prior to this time in August, she had a cholecystectomy with the complication of a subhepatic abscess. She

developed decreased mentation with normal laboratory parameters. A blood culture grew gram-negative rods for which she was treated with antibiotics. A computerized tomography scan was performed and showed diffuse cerebral edema. An electromyelogram verified the present diagnosis. She was admitted to the rehab unit for physical and occupational therapy.

My niece is a registered nurse in California and her husband is a pharmacist. I have always been good to visit my doctor every month to check my blood pressure reading as well as my medications.

Health is unappreciated until a person becomes very sick. To have good health a person must eat properly and stay active by jogging, playing tennis and bowling. A person with good health can face anything. The more that a person can learn about health, the more able he is to take care of his body.

If I wanted to learn about a strange disease, I would refer to my pocket dictionary of medical terms in my home. If I needed more information, I would go to my doctor's office or to the public library to study medical books. If I knew I had the disease, I would probably go to another doctor to get his second opinion. Doctors are human and can error in their diagnosing techniques.

Learning about health here at University Hospital is easy because the rehab ward provides films and articles to read about different types of injuries and diseases. One film which I watched discussed skin ulcerations. If a person remains in one position too long in bed, he may develop bed sores. I also recently watched a TV show which described how blood travels through the body. It was quite interesting. We do not have a cable channel.

Reader's Digest has good articles concerning medicine. I recently read an article on the treatment of kidney stones with light beams. The patient does not even need to have surgery! The articles on health in those throw-away newspapers like The Enquirer are another matter. The articles are far-fetched without an ounce of truth. I am not even sure who write the articles. I would be more likely to believe the articles if doctors or nurses or other medical professionals had written them. I also do not believe the health rumors that people hear about. Some of those ideas can be as bad as reading The Enquirer. A person has to be aware of reputable sources!

Calling my doctor is the first course of action for me when I get a cold to get a refill on my previous cold prescription. I also tend to buy supplemental products like Anacin, aspirin, throat lozenges, and Vicks rub (for sore throats) to have on hand from the drugstore. If I have a fever for over one day I will call my doctor. If my face starts to become puffy, I always call my doctor because that symptom usually means that my blood pressure is out of control. My family does not boast of any tradition home-remedies unfortunately.

Vera Randell (continued)

The medication products which I have mentioned have been used by my family for years so we tend to buy them out of tradition. Years ago when these products first came out, we were probably influenced by the TV ads and magazine advertisements.

My family uses very little health food: sugar free candy and bran flakes. We tend to eat more healthy diets with the balanced food groups. Using health food products is a personal choice. People should not buy them if they have allergies to these products.

My family is not one to buy new medications as they come on the market. When the Tylenol scare occurred, my family had still never tried the product! As long as an OTC product has the FDA approval and a tamper-proof seal, that product is safe to buy if the consumer has a genuine need for that drug.

A medication is a product which is used to help keep the body going. A medication may be an over-the-counter product or it may be prescribed by the doctor. If the medication has addictive qualities, it is classified as a drug. Pot, Coke (not cocaine), and Tab have addictive qualities since people become hooked on them and should be classified as drugs. Vitamins are also drugs since people tend to buy more vitamins than they really need.

If I thought that a medication which my friend was using would be helpful to me (depending on my symptoms), I would still want to call my doctor and check it out especially if a prescription drug was involved. I am allergic to sulfa so I have to avoid such products. My friend may also have allergies. To avoid any types of bad side effects, people should not pass medications between themselves.

Pharmacists tend to spend the most time with the patient discussing medications here in the hospital. My family doctor spends about 10 minutes discussing the effects of a new drug. My rehab doctor spends on a few minutes since he has so many patients to see. My rehab doctor only tells me what the drug will do once inside my body. The pharmacist explains the name of the drug, directions and the proper way to take or use the drug. I enjoy my conversations with the doctor even if they are brief.

A doctor acts to diagnose problems, prescribe drugs and refer patients to other doctors for more professional opinions. Pharmacists work with the doctors to fill prescriptions, recommend OTC products, keep an active drug record and control all drug use in the hospital and community. My only interaction with the pharmacist other than here on rehab involves the local drugstore pharmacist who refills my prescriptions. A person should do business with only one pharmacy. This allows the pharmacist to be more familiar with his family and their health records. My interactions with the pharmacist have been brief so I do not know the extent of their educational preparations. My pharmacist makes

Vera Randell (continued)

me feel like I really matter. He does not just fill my prescription and shove me out the door! A druggist on the other hand can only work in a drugstore. The pharmacist handles all the medications.

Here on rehab, the nurses have been most helpful to me to learn about my medications. They use easy language to explain the name of my medication and how it works inside my body, and why this drug is important for me to take regularly. If the nurse cannot answer my questions, I make a note and ask the doctor in the morning. The medication sheet which the rehab pharmacist gave to me has been helpful for me to read and learn important points about my medications. If the pharmacist was more accessible to this floor, I would probably rather learn about my meds from him than the nurse!

My blood pressure is being controlled with clonidine. I check my blood pressure everyday to know that the drug is working. I really don't know any more information about it. I think it is important to know how the medication works in the body as well as the reason the doctor wants his patient on that drug. People should also know the name of the drug to prevent medication accidents in times of emergencies.

On this list, aspirin treats headaches. Alka-Seltzer soothes a stomach ache or a cold. Milk of magnesia aids the constipated bowels. I have never heard of Zantac, Colace or Dibenzyline.

VF = Venice Fitzgerald

VF is a 66 year-old white female who experienced a right cerebral vascular accident in January 1985 with secondary left hemiplegia. Her hospital course has been uncomplicated. VF is a retired company clerk who is married with one daughter and two grandsons.

No members of my immediate or distant family has jobs in the health field. I usually see my doctor on a frequent basis: once a year for a physical exam, once every four months to check my blood pressure and my medications.

Health reflects the degree of condition of the heart and lungs. One can participate in activities as extensively as his health allows him to be comfortable while doing the activity. The person can always watch or listen to the activity. Learning about health is important because it aids a person in taking proper care of the body. I do not know how to treat heart failure but rely on experts to help me learn about the treatment. Medical books are interesting to read but medical experts such as doctors can help the reader to appreciate the complex human body. Good health allows a person to enjoy activities such as crocheting which I enjoy until my eyes become tired. Learning about health can also

Venice Fitzgerald (continued)

help a person to cope with stress. After a person has a stroke, learning about the importance of physical therapy becomes a primary goal.

I have learned about some of the new health research on television. I watched a show on heart transplants which showed the actual surgery. I have also tried to keep up on the artificial heart news. We have no cable television.

Many of the magazines which I buy do have health-related articles in them. Healthy recipes and diet plans are found in McCalls, Ladies Home Journal, Reader's Digest and National Geographic. I have read some of the health articles in newspapers like The Enquirer. I think the articles are more entertaining than interesting. I have arthritis and have read alot on the current research. The articles are also not written by well known doctors in the arthritis field. At least the ladies magazines have authors who are consulting doctors or medical experts.

I tend to feel skeptical about the health information which I hear from friends and other people. I generally want to read more on the subject. I have had arthritis all my life and know there is no cure. Listening to the tales of other people may be a waste of time. Since I have heard about the current research, I may believe a person with arthritis who has had personal experiences with such treatments.

My home has a set of general encyclopedias which do contain information on diseases and some drugs. My daughter also has a book which deals with symptoms, diseases and treatments.

Second opinions are important to ensure quality health care. My sister who also has arthritis fell and broke her hip. Her own doctor set the bone improperly which was not discovered until later. I recommended to her that she should visit my orthopedic doctor for a second opinion. She did and now is on her way to recovery!

When I decide to treat myself I use Anacin for headaches, Pepto Bismol for upset stomach, Kaopectate for diarrhea and Metamucil for constipation which I usually buy at the grocery store. I learned about these products through various advertisements. I also like to make up a recipe of ginger tea which my dad taught me. I mix ginger, sugar and boiling water. He also makes a cough syrup made of honey, butter, and lemon juice. Medicine has really changed over the years. I used to rely on these old-time remedies for relief and now call the doctor for a prescription. Medicine is more complex today yet more specific for certain types of diseases. I generally call my doctor for fevers, severe cramps or symptoms never before experienced.

Venice Fitzgerald (continued)

Fancy health foods are unnecessary for good health. If a person cooks properly with vegetables, fruits, meats, and whole wheat breads, he will be promoting good health. My neighbor eats health food like a crazy woman and she has no better health than I do. Health foods are also very expensive.

I usually do not buy over-the-counter drugs without talking to my doctor first. Too many hoax drugs are on the market for arthritis and may be harmful or useless depending on the condition and other drugs a person may be taking. Some TV ads leave me quite confused so I like to okay my drugs with the doctor.

Medications are taken or used to help or cure illnesses such as congestion. Medications may be OTC or prescribed by the doctor. Drugs are only prescribed by the doctor such as codeine or Percocet. Hard drugs like marijuana are illegal and dangerous since we do not know everything about these drugs yet. Vitamins are neither a medication nor a drug. They fall into their own category.

Over-the-counter medications are safe to buy because of the extensive FDA testing requirements before marketing. This ensures consumer safety. All medications now have to have safety packaging too. The products are safe generally but may not be safe for the patient who is allergic to the drug or for the patient who takes many other medications.

Depending on the effectiveness of advertisements, I may consider buying a new OTC product. I like to ask the pharmacist how the new product compares with the older products. Sometimes no difference exists except cost. The pharmacist is also helpful when a person cannot decide on the type of Robitussin cough syrup to buy.

If my friend was feeling down with a cold I would recommend my OTC remedy to him if he said that his present medication was not helping. I would leave it up to him to investigate the drug and buy his own supply. I do not believe in sharing OTC or prescription drugs because my doctor has told me not to do so.

A doctor does physical exams, checks blood pressure readings, checks the Pap smear, does the EKG and checks the blood for abnormalities. My family doctor spends about 20 minutes discussing my new prescription whereas the rehab doctor spends about 5-10 minutes. My doctors are very good about answering my questions.

The pharmacist fills the prescription which the doctor writes. He is a very good source of information to tell patients the use of drugs and ingredients of products. Pharmacists go to school the same amount of time as doctors: 4-10 years. The patient can also learn about the safety of a product from the pharmacist. Even though the pharmacist has as much preparation as the doctor, I would rather learn about my medications from the doctor since he

Venice Fitzgerald (continued)

prescribes the drug in the first place and is very familiar with my health record. Learning from the pharmacist would be my second choice. Nurses do talk to the patients about drugs but I am unsure of the extent of their drug education.

Doctors only talk about the name of the drug, the directions, and proper use of the drug. Side effects are sometimes mentioned. The pharmacist describes the drug in more detail. He describes the name, directions, use, cost and common side effects. If the drug product is available in the generic form, the pharmacist can explain how the generic compares to the brand name. My husband recently had a CABG. His doctor put him on Isordil. When he was given the generic brand, the pills were useless. A person has to be sure that he talks to the pharmacist in the drugstore and not the druggist. The druggist is a clerk who works in the drugstore and does not have the education of a pharmacist. We visit our pharmacist once per month for refills. Our pharmacist is jolly, friendly, trustworthy and likes to answer our questions.

Inderal LA is a medication which I use to treat my high blood pressure. I am not sure how it actually works in the body but I do know that it is long-acting. I only need to take one capsule daily to lower my blood pressure. I would like to know how it compares to hydrochlorothiazide.

On this list, aspirin is used to treat arthritis and headaches. Milk of magnesia is used to treat constipation. Alka-Seltzer is good for an upset stomach. Dibenzyline is used to treat allergies. I have heard of Colace but not Zantac. If I had to take Colace, I would like to know how it works in the body. Is this drug a narcotic? What are its side effects? Am I pronouncing the name correctly? Correct pronunciations are important because it prevents mistakes when the drug has to be refilled.

BS = Brenda Savage

BS is a 49 year-old white female who was diagnosed with herpes simplex myelitis in November 1984. She was treated with acyclovir and prednisone but has residual secondary lower extremity paraparesis. BS is divorced with three children.

No members of my family work in the health field. My niece who is in high school may decide to go into medicine.

I see my doctor quite regularly for my allergies. I receive allergy shots twice a year. Before I developed allergies to bee pollen and dust, I would only visit the doctor once every 10 years.

Health refers to the act of keeping the body well through exercise and proper diet. A person has to learn the perfect balance between these two to prevent overdoing one area. Health is an important

topic to learn about because many people do not have any common sense about eating and exercising. A person may easily abuse their body unknowingly.

If I wanted to learn about a special disease I would look it up in my medical dictionary at home and then go to the public library and read about it. If I thought I was coming down with the disease, I would seek the appropriate doctor or specialist to diagnose it and decide on proper treatment.

Learning about health is very educational. I may watch various health programs or specials which come on television. I definitely cannot watch surgery performed on TV because the pictures are too gross. Watching these programs does give a person an appreciation of the body. A person does not really know how to appreciate health until he is faced with a major health problem. I do not have very good control over my bowels and bladder due to the infection which I recently had. I appreciate these organs now because I can no longer rely on my body's signals. I have to tell the bowel and bladder when to work during my bowel and cath programs. I know Salt Lake has a cable health channel but I have never watched it.

Reading about health in the Reader's Digest can be interesting. The articles are valid because my mom reads the digest a lot. I have heard of newspapers like The Enquirer but I have never read any of the articles. I have heard that these newspapers are not reliable. If that is true, I would not believe what I read and only half of what I see. It is important to question this type of information because anyone can publish an article. I would like to know the background qualifications of the writer. I will be the judge to decide if he is qualified to make such statements.

Second opinions are a good option. I would not necessarily doubt the first doctor's opinion, but the second opinion is a means to confirm the first opinion. If a confirmation is not given, the patient may realize that no one answer may be correct. He may have several options.

Tylenol which I buy at the grocery store is my choice for treating colds and flu. Advil is good for aches and pains. I do not buy many over-the-counter products due to my allergies. I also like to cure the dry air by boiling water to create steam and mix in Vicks for a soothing humidification. Hot lemon with honey in water is also good to relieve a sore throat. I would call my doctor if fevers or severe symptoms such as dehydration were present for longer than 24 hours.

A person has to be careful not to be caught in the cycle that a pill exists for every ache and pain. If a person thinks a pill will work, it probably will. Psychological input with medications is powerful! When I had migraine headaches, I would cycle Coke

Brenda Savage (continued)

and aspirin by the cases. My doctor said that I had created a mask allergy to Coke and aspirin. I was actually creating my own headaches. My headaches were psychogenic.

The type of health foods which I buy benefit my allergic state. I buy potato chips with safflower oil, raw juice without sugar (Yeasts can build up in the concentrated juice and create allergies.), raw vegetables and avoid enriched flour with all its additives. Health foods are not very important. Our diets are so advanced that we tend to forget the basics. Additives are put into everything to the point that our foods are nutrition-free. People also take too many vitamins. Eating a balanced diet provides daily vitamins. If I have a deficiency which has been diagnosed by a doctor, I would then take a vitamin for that deficiency. A balanced diet has to be supplemented with exercise. A good motto to remember is: You are what you eat.

Taking too many OTC drugs is not healthy either. People put too much faith into the TV commercials. The Nyquil ad says that the medication takes care of coughing, sneezing, scratchy throats and fevers. It only makes a person fall asleep. I tend to use the medications which have been used by my family for years such as Tylenol. I do not believe in shoveling in the drugs for every ache and pain.

A medication is a type of compound to relieve a condition such as pain or fever. Medications are not addictive like drugs. Drugs include morphine and Coke. Medications include aspirin and Colace. A vitamin is not a drug. Vitamins correct a deficiency in the body to restore a balance.

Over-the-counter medications are safe to buy provided a person has faith in the drug company. The tamper-proof seals restored my faith in Tylenol. The bulk foods in grocery stores scare me since anyone could slip anything into one of those big barrels. The pharmacist also has a lot of worries because one of his prescription stock bottles may have been tampered with before it ever reached his store. He may still fill prescriptions from that bottle which may cause problems for the patient. Good drug regulations such as the tamper lids can prevent these problems from occurring.

When treating myself, I generally go by my own experiences. If I had symptoms which were very unfamiliar to me, I would call my doctor. I do not believe in passing OTC or prescription drugs between people. I may tell a friend what effect a certain product had on my symptoms, but I would leave the decision up to my friend whether to buy it or not. Contac makes my head spin so it is important for people to know about the effects of drugs beforehand.

A doctor goes to school many years to gain the knowledge which allows him to give an opinion in the form of a diagnosis to treat a

Brenda Savage (continued)

condition. My allergy doctor spends the entire clinic visit talking about my allergy injections. My rehab doctor spends 30 minutes with me initially telling me about my self-med program's purpose and my responsibilities. My visits with the doctor are usually interesting except when he thinks I should know the answer to my own questions. I would not ask questions if I knew the answers! Doctors have a special way of making the patient feel stupid and tend to forget that the patient is an important person.

The pharmacist has a very good knowledge about drugs. Drugs are his specialty. The pharmacist tells me how to take a certain drug, how the drug works in my body, what side effects occur commonly, about precautions to be aware of, my responsibilities as the patient. I feel welcome to ask questions which helps me learn more basic principles about the drugs. The pharmacist also provides a special medication sheet which covers the drug's purpose, action, directions, and side effects. It provides a good review. Before coming into the hospital, I had no reason to see a pharmacist. I feel now with my experience that the pharmacist is most prepared and most helpful to teach me important points about the medications. I find the pharmacist/druggist question very interesting. A pharmacist has a formal education specializing in medication use. A druggist is an apprentice with some basic drug knowledge.

If any questions develop on a new medication which I may be taking outside the hospital, I would call my doctor first since he prescribed the drug to begin with and has my health records handy. If my question came to mind while I was having the pharmacist fill the medication, I would feel confident in his answer.

Colace is a drug which I use very frequently for constipation problems. It works by keeping my bowels working. I know when this drug has performed its action through visual inspection and instant comfort! I am satisfied with the information about Colace on the information sheet. It would be nice to have access to a medication book to read about other side effects of this drug and general information.

On this list, all the drugs are familiar to me except Zantac and Dibenzyline. Aspirin is used to treat minor pains. Milk of magnesia treats the constipated bowel. Alka-Seltzer soothes the upset stomach. Colace is a stool softener. If I had to take a drug like Dibenzyline, I would first want to say the name correctly. Many similar-sounding drugs may result in the wrong drug being given to the patient. Knowing how to spell the name is important too, especially for people who cannot talk. I would also like to know the common side effects, action in the body, my purpose for taking it, the habit-forming qualities, the length of time which I need to take it, adverse effects which may occur after one dose, and is a tapering of the dose required before I can stop

Brenda Savage (continued)

the drug. I would like to learn about the medication from my doctor first since he is prescribing it. I would then make sure that the pharmacist also talks to me so I can get more detailed information. The details help me to understand the basic information which the doctor gives me. Two viewpoints are better than one!

JB = Jack Brisbo

JB is a 60 year-old white male who experienced progressive weakness in his arms and legs in April 1983. All diagnostic studies were negative except for a computerized tomography scan which showed a loosency of the C-5 vertebral body. A decompressive laminectomy was performed from C-3 through T-1 and the spinal cord was noted as normal. During this time blood cultures became positive for Staphylococcus aureus. He was diagnosed as having a possible vertebral osteomyelitis. JB has had various episodes of pneumonia, confusion and lethargy with progressive loss of motor control of his extremities. The etiology of his quadriplegia remains unknown. JB is a retired carpet buyer who is married and has two children.

My cousin is a nurse for the Peace Corps in Ethiopia. He has some interesting tales about health care in that poor country. My niece is also a registered nurse and works locally.

Before I became ill, I usually visited my family doctor once every six weeks to check my blood pressure and evaluate my blood pressure medications. After I was discharged from the hospital in December 1983, I only saw my doctor one time until this admission.

Health is a feeling of well-being where the body functions properly and the mind thinks clearly. The healthy body allows the person to participate in favorite activities such as sports (especially golf). My illness has limited me to more passive activities as reading, watching TV and doing crafts. I feel very dependent now but I do want to be more free to do things on my own. A person can never truly appreciate their health until he no longer has it.

After the Korea and Vietnam wars, I read about the veterans who became quads as a result of those wars. I thought how terrible it would be. I knew what the term 'quad' meant but I thought it was a horrible disease. As a carpet buyer I traveled a lot and would visit various public libraries reading about the topic. It was difficult to find information on the subject other than definitions and possible causes of the disorder. Little did I know that someday I would be experiencing a physical problem which I dreaded. The care and maintenance manual provided by the rehab floor has allowed me to look at this illness with a more personal perspective.

Health is a very precious component of life. It really bothers me when people do things to themselves which really aggrevate their

Jack Brisbo (continued)

bodies. Smoking causes cancer yet people continue to smoke. People get diabetes yet do not watch their balance of diet and exercise in the early stages. If people only knew....

Watching cable TV provides a good way to learn about health. I watch Channel 22 which has a show called Lifestyle. It is a talk show with mini-series on exercise, advances in health care such as diabetes care, the revelations of people who have come back to life after being dead. I usually watch it every evening.

My reading includes such magazines as People, Newsweek, Time and various current event throw-aways. I like to read the health articles in all of these magazines. One article discussed current concepts in juvenile diabetes. Did you know there are 11 million juvenile diabetics in the United States today?

Yes I have sneaked a peak at one of those Enquirer-type newspapers! I think it is important to at least consider the health information offered in these newspapers which have a poor reputation if any. One never knows if something once thought to be ludicrous may turn out to be a milestone for the terminally ill. I do not accept the information at face value but it is important to know what other people are thinking about. I read a nursing journal once which had an article in it about a muscular sclerosis patient who was bitten by a scorpion and went into remission. This situation may not be medically feasible but it is interesting nevertheless.

Second opinions are very important. They improve communication between people to bring out views not seen before.

My family medical library consists of my rehab manual and one hard cover general health encyclopedia which have been well used!

Through advertising and the grocery store pharmacist I have learned about and used Pepto Bismol, Tums, and Rolaids for upset stomach; Tylenol and Anacin for minor aches and headaches. These products have been helpful at times but I tend to rely on an old remedy my mom used when I was small: black or green tea. It is the only remedy that tends to stay down! If my symptoms did not improve after a few days, I would definitely call my doctor.

The extent of the health foods in my home include bran cereals and bulky foods. Health foods are good to some extent. Health foods contain good things for the body such as vitamins and bulk. Bananas, raisins, and avocados contain potassium so I do not have to take so many potassium pills with my blood pressure meds. I think that since people have become more aware of health foods, they may be eating more balanced diets.

When I have flares of my arthritis I take Motrin to relieve the pain and swelling. If I should have another arthritis attack when

Jack Brisbo (continued)

my Motrin prescription has expired, I would definitely buy Advil. It is the same compound as Motrin but available in a milder strength. The Advil ads on TV have been very influential by mentioning the name Motrin. I know by experience that Motrin works!

A medication is an over-the-counter or prescribed product given to a person to relieve pain or sickness. Medications are not habit-forming like drugs. When a person takes drugs, he takes the risk of becoming addicted to the drug. Drugs include morphine, cocaine, and Valium. Medications include Tylenol, Mandelamine, and vitamins. Any medication or drug can be overused including OTC sleeping pills so people have to use good judgement with each dose.

If a medication was helpful to relieve my symptoms in any way, I would want my friend to know about it so he could have a chance to relieve similar symptoms. Health information is important to share with others. The sharing and considering of advice is important. A person can use his own judgement if he desires to try the treatment. I would consider trying his medication if our two health conditions were identical and the product was available over-the-counter. I would check with my doctor on any prescription meds.

Doctors have all the answers. They spend many years in school to receive a good education and many years in practice helping people. I place all my faith in my doctor as a friend and physician. The doctor is a very busy person and I can understand why he does not have time to answer my questions. I usually save my questions until the next time I see him. He usually spends 20-30 minutes discussing all my medications initially. We discuss the action and side effects of the drugs. When I am given time to ask questions, many of the answers do not satisfy me. Many of my questions probably have no answers. I do wish the doctor would slow down a bit. He will ask me if there is anything he can do for me and then leaves before I can even answer!

The pharmacist in the drugstore dispenses medications on a prescription basis. The hospital pharmacist tends to be more aware of each patient's health record. In my experience, the pharmacist has only told me what the drug is used for and the reason that I need to take it. The pharmacist who rounds every morning with the doctor seems like a very concerned individual but I do not understand her role. Since I have such a good relationship with my doctor, I would rather learn about my medications from him.

My wife usually sees our local pharmacist every two weeks for refills. He is a very sincere man who is friendly and easy to talk with on medications. The druggist question is interesting. A druggist is the operator and owner of a drugstore. He tends to be a jack-of-all-trades and can dispense some drugs. A pharmacist is hired to work especially with the drugs to dispense prescriptions.

Jack Brisbo (continued)

At home I take a diuretic called Esodrex to remove fluid from the tissue to control my blood pressure. I do not remember the directions offhand. I really do not need to know any more information to take this medication.

On the list I know that aspirin is used for minor pain and headache; milk of magnesia aids indigestion and constipation; Alka-Seltzer is like aspirin to relieve aches and pains but also treats indigestions; Colace is a stool softener. I have never heard of Zantac or Dibenzyline. The only information I would ever want to know about them is what the drug will do for me and what side effects may occur. I should also know how to say the name of the med correctly. An emergency situation may become a disaster if a person does not know the names of their medications.

SF = Sam Ford

SF is a 24 year-old white male who was involved in a high speed motor vehicle rollover in October 1984 which resulted in a T-11 paraplegia. Prior to this time, he had been involved in separate bicycle and motorcycle accidents which involved various fractures. During this hospitalization SF had experienced a urinary tract infection, pleural effusion and Clostridia difficile colitis all of which have resolved. Although his sister was recently killed in a motor vehicle accident, SF has maintained a good outlook about the future and his training as an emergency medical technician (EMT).

My career as an emergency medical technician has involved extensive training in technical team work. My squad was responsible for emergency calls in the back country of Idaho. It was a very demanding job and I enjoyed it. My aunt who lives in Ohio also works in health care as a registered nurse.

Because my EMT work required me to be in perfect physical condition, I would visit my doctor once a year for a physical exam. I was probably more willing to go to the doctor because one of the requirements for EMT license renewal involves a yearly checkup.

Health involves a total function of all body systems. Having good health allows a person to feel good physically. His mental health allows him to cope with daily situations and his emotions. When a person is healthy, he can participate in any activities of his choosing such as swimming, jogging, camping or hiking.

Health is important to study so that a person can be more aware of the things he puts into his body. Studying health gives a person a better perspective on the complexities of the human body and how fine-tuned all body functions are to maintain a proper balance. When a person is in the hospital (or even at home for that matter), he must set goals both on a therapeutic and emotional basis to regain his health. He must also be aware of the goals being set

Sam Ford (continued)

for him by his physicians. In order to set my goals, I need to know the total health picture of my body. This has been difficult for me to do on rehab because the physicians will not tell me what is exactly wrong with me. The physicians order a drug for me and tell me to take it. In order for this drug to set good with me, I need to know the actual drug components and side effects. I am allergic to many drugs including some antibiotics which may cause ulcerations in my colon.

If I want to learn about a disease I will call a community disease organization which would be familiar with that disease. They would probably provide me with literature to read or refer me to other sources of information. I also know several MDs who are friends of mine who I would feel free to ask questions. If I thought I actually had the disease, I would contact my private physician who could initially diagnose the problem (or refer me to another specialized physician) with various tests as a CBC or urinalysis. I would learn about the disease from the physician. If the disease was extremely rare, I would call the CDC to get more information.

One of my main interests of reading involves thoracic surgery. I am interested in this area since my injuries encountered by the EMT involves the thoracic cavity. I also enjoy watching Lifeline on the PBS channel. One show involved an actual surgery showing valve resections. The HBO channel recently showed The Magnificent Machinery which demonstrated an actual heart catheterization on television! As an EMT, my squad has also visited public schools to teach children about first aid. A show called The Body Human is available for the VCR and is educational on the body's various functions. An x-ray machine was also used to demonstrate the relationship of the bones to the running body.

Besides having various EMT books for reference, I also own an anatomy book from the World War II era which is now banned in the United States. The book is interesting because it shows actual pictures of anatomy. Unfortunately it was written by Germans about the Jews.

My library also includes the PDR, Surgical Nursing Skills, a CAT scan book, and several x-ray books. By having a little x-ray background I have been more able to appreciate the thinking behind the treatment of my latest injury. The nurses here on rehab become nervous when I tell them what I know about health. Rather than try to help me learn about the medications and my injury, they actually take books away from me! In the case of the PDR, the nurses think I will probably let my mind concentration on 'all' the possible symptoms and side effects! My mind is used to learning about mechanisms of action of drugs, side effects, drug-drug interactions and overdose information. This is second nature to me because of my work.

Sam Ford (continued)

Learning about health is an almost daily event for me. To be certified as an EMT, a person has to take monthly and yearly tests, go on rounds with the physicians and do practical application tests. Unfortunately, this program does not conduct seminars on new topics. We learn and relearn the fundamentals of emergency rescue so that it becomes second nature to us. I would like to see the program be more progressive with seminars on current topics of interest. The hospital in my home town also conducts a program where a person can listen to health topics by dialing a certain phone number. This has had a good response although I have never tried it due to my schedule.

I read magazines which are related to my work such as Journal of Emergency Medicine which has numerous articles on CPR and hypothermia. A person can go into any hospital in the USA and find two physicians who will have two different opinions on when CPR should be started. If CPR is started at the wrong time, a person may go into atrial fibrillation. In the case of drowning victims, the body can be resuscitated even when the heart is only beating two times per minute. Younger bodies tend to have a better prognosis than adults due to a slower metabolism rate.

Newspapers like The Enquirer are a waste of money. The Enquirer stated that laetrile was a cancer-curing drug. It is really no better than a placebo. I only tend to believe well documented studies in well known journals such as Journal of Emergency Medicine, American Health Journal and Medicine. Having an EMT background, I am more able to decide which health information is hocus-pocus and which is valid material.

Medicine has changed a lot from the old days. People used to go to their general practitioner for advice and care. They would follow that advice with no questions asked. Things have changed because now the patients are starting to ask questions. One situation which may have triggered this change is the knife-happy attitudes of surgeons. For the patient, surgery is not a pleasant experience. Some surgeries are performed when they are really not necessary. Second opinions have now become a common activity. A patient wants to have a physician which he can trust to meet and satisfy the needs of his body.

Before we go on I would like to say that being an EMT has been a rewarding experience. The reward is seeing a person who was once near death, but because of the expertise of our squad and our life saving techniques, is now able to shop for groceries or whatever. It is such a warming feeling.

Colds and flu have to run their courses. Medications are worthless here. I only treat myself with fluids and plenty of rest. If joint pain becomes too uncomfortable, Advil, which is similar to Motrin except a milder strength, is a good choice. My dad recommends hot lemonade for any sick complaints. I would call the

Sam Ford (continued)

doctor if symptoms such as diarrhea or vomiting did not cease after 24 hours. Unfamiliar symptoms can be frightening and would prompt me to call my doctor.

Health diets such as the protein diet or the herbal diet should only be used with a doctor's recommendation. The protein diets were once thought to be safe until some people died. I enjoy eating salads but salads are not a health food. Salads are a healthy food! Health foods contain a lot of extras the body does not need. When the body consumes too many vitamins, the kidneys spill the excess.

Buying a new medication at the drugstore for the sake of buying is not a good policy. When I had an impacted knee, the physician gave me Motrin to decrease inflammation and promote blood flow to the lower extremities. When Advil came on the market, I bought it because it contained the same active ingredient as Motrin (ibuprofen) in a smaller strength. Advil is a new product but not a new compound. Ibuprofen works! People tend to get caught in this trap when they buy a 'new' medication. I make an effort to understand the active ingredients. Many over-the-counter products have subtherapeutic amounts of active ingredients. This makes them no better than placebo.

A medication is a substance used to control pain or metabolic imbalances in the body. The mind also plays a major role alone and with drug therapy. The mind can cure the body. A physician told a friend of mine that he would never be able to move his legs again (keep in mind that his injury is very similar to mine). My friend believed the physician and as a result has progressed much slower than I. By having a positive mind and progressive attitude in therapy, I am starting to move my upper legs! Medications are used to restore or maintain health whereas drugs are used to destroy health (though not necessarily by intention). Tagamet is a medication. LSD is a drug. Morphine is both a drug and medication. Provided that morphine is used in the legal sense for pain control as in cancer patients, it maintains its medication status. Vitamins are not a medication or a drug. Vitamins make up their own classification since they are natural products which enhance health.

All the medications on the American market are safe to use. The FDA requires the drug company to do extensive animal research for each drug. Once the drug passes these requirements, it is used in human studies. A drug goes through so much red tape by the time it reaches the consumer, it is safe to use. Once the drug reaches the consumers' hands, the possibility of tampering exists which makes the drug unsafe for everyone. Improper use of drugs through overuse, overdose, interactions with other drugs or foods could make the drug unsafe to use for that specific individual.

Sam Ford (continued)

Following my own advice when I feel sick is my best choice. People can come up with some of the most strange concoctions to treat colds. I may consider trying an over-the-counter product by a friend's recommendation if I am familiar with the active ingredient. I always buy my own medication at the supermarket-drugstore since sharing medications is not a good idea. If I think I may need a more potent medication, I will just call my physician. When dealing with medications of any kind, it is important to be safety conscious.

A doctor (or physician which is a more correct term) acts to diagnose and treat illness. He or she gives security to the patient by showing concern. If the physician feels his/her expertise will not benefit the patient, he/she will call another medical specialist for their opinion. A physician should tell the patient about his complete health picture so that the patient can realistically set his goals for restoring his health. Honesty is the best policy so that the patient is given the chance to come to terms with some emotional issues.

My family physician tends to spend more time discussing my medications than the rehab physicians. This is probably due to a stronger friendly relationship which I have with my family physician. He discusses the directions, uses, side effects and interactions. When I review the medication in the PDR, I like to ask more questions to gain more knowledge on the drug. The physicians on rehab tend to only concentrate on what the drug is used for. They never discuss the side effects. In the case of some residents, I really don't think they know the side effects or feel confident about discussing other medication information. It would help if they would just admit it but that would be too big a blow to the ego. A physician should not have to know all the effects of drugs. Pharmacists are a compliment to the medical team but doctors do not utilize them enough. Some physicians may refrain from discussing the medications to protect the hypochondriac and his symptoms.

My conversations with the physician are interesting and I appreciate the times when we do talk. I want the physician to always be straight with me to tell me what is going on with my body. I want him to tell me when he is unsure about a diagnosis. If I was going to stick someone with a 16 gauge needle, I would not tell him that it would only sting like a little tiny bee! I appreciate an honest relationship. Some of the conversations with a select few of physicians on rehab are difficult to understand. Some MDs talk down to the patient because they cannot deal with common people. The high degree of education and egotism makes them this way. I appreciate the nine plus years required for the degree. Some MDs forget the basis of medicine: the patient. This results in the disease being treated but not the patient! Physicians also do not spend enough time discussing each patient's progress. The nurses spend the most time with the patients and

Sam Ford (continued)

receive very little of the credit. The patient has a responsibility too that is sometimes overlooked. The patient has to show enough concern over his body to know when the physician is not showing enough concern for the patient! It all balances out that the patient has to look out for himself.

A pharmacist is a very important part of the medical team. He/she answers various questions on medications for the physician and patient. Many times these questions are very difficult and require extensive research. A pharmacist does not mind though because this is his specialty. He has gone to school for at least five years. The pharmacist dispenses drugs by prescription. He controls the use of drugs, too. (Some people will go to various physicians to get prescriptions to keep up with their habits. If they make the 'mistake' of going to the same pharmacist, the pharmacist can control overuse by discussing the problem with the physician(s). Pharmacists talk between themselves to know who the users are). A pharmacist also oversees quality control by watching for expiration dates on drugs and ensuring proper use of drugs. Unfortunately the pharmacist has to read some very crummy handwriting of the physicians' prescriptions. In a way this omen may be a blessing because the pharmacist calls the MD to verify the prescription.

The pharmacy residents have been the most helpful on the rehab and surgical floors. They have discussed the directions, use, side effects, interactions with alcohol, coffee and other drugs which I am taking, what to do when a dose is missed plus provided me with typed summaries of each medication. The pharmacy resident is also the best prepared individual in the hospital to discuss medications because he/she has the dedication to concentrate on this career choice. In the community, the retail pharmacist is still the best expert to discuss medication problems and questions. In my experience, these individuals have always been friendly, conscientious, and concerned professionals.

Going to the same pharmacist on a regular basis is a good habit. This develops the foundations of a lasting friendship. The pharmacist is able to discuss medication in relation to the patient's other medications. He/she will contact the physician if a drug interaction is suspected. The pharmacist is a drug information reference who can provide the patient with detailed responses on precautions, warnings and side effects. Before my accident, I would visit the local pharmacist regularly to keep my first aid kit supplied. I also refilled my Benadryl prescription several times for possible allergies while in the backwoods.

Health care involves communication. The patient has to tell the physician his symptoms. The physician and pharmacist discusses a treatment plan. Both team members discuss the plan with the patient. When an unfamiliar medical term is used in conversation, I like to ask or look up its meaning. My EMT terminology is quite extensive but never complete.

Sam Ford (continued)

The druggist question requires some thought. We have discussed the pharmacist issue in detail. A druggist is like a pharmacist except he cannot dispense narcotics like a pharmacist.

Tylenol No. 3 is a drug which I am very acquainted with here on rehab. It is a pain reliever which can also cause constipation and psychogenic dependency. I do not know how it really works since I have not received any information on it yet.

Aspirin is a mild pain and fever reliever. Milk of magnesia is a laxative to aid constipation. Alka-Seltzer is also used for headaches, as well as GI distress. It can cause some stomach distension due to the carbonation. I have heard of Colace and Dibenzyline. I have never heard of Zantac. If I was going to take Zantac, I would want to know which symptoms it will treat, side effects, directions for use and any significant interactions.

Knowing how to say the medication's name is part of being informed on my drug regimen. This is very important for parents to know as well. When the EMT comes on the scene, he/she has to know the patient's allergies, medications, brief significant past history, time of last meal and the events which lead to the emergency. We spell this as A-M-P-L-E. Knowing medication names is important for the 'M'.

IW = Isaac Walton

IW is a 67 year-old white male who suffered a left cerebral vascular accident which resulted in right hemiparesis on October 1984. This semi-retired mechanical engineer has had an uneventful hospital stay and has been progressing steadily in the physical and occupational therapy programs. IW is married and has four grown children.

My life has always been involved with medicine in one form or another thanks to my son. He is a medical doctor with specialties in surgery and emergency medicine. We are in constant communication with each other so I learn about the more current topics in medicine whether I want to or not!

Since I had this stroke, I have felt negligent about taking care of my health in the past. In the past four months, I have seen the doctor five times! During that time I suffered from a pulmonary embolism, a perforated ulcer, a dislocated disc in my back and now the stroke.

Health is the quality of a person to be original within his environment with habits which are active and progressive; with a mental attitude which is vital to promote physical and mental growth. Both components are important. A healthy person can participate in any activity which he sees fit. He can lift weights

Isaac Walton (continued)

or play bridge. An unhealthy person who normally lifts weights may have to settle for playing bridge!

If I was interest in learning about a disease, I would write or call the national organization which specializes in that area. Examples include the cancer foundation, heart or epilepsy organizations. These folks could provide me with literature or refer me to other sources such as a teaching university where the cures for such a disease are currently being researched. The US government tends to lag in red tape and would not give correct referrals. If I knew the disease I would go through the same channels plus see a specialist. If I had a rare blood disorder I would see Dr. Wintrobe to be in a pilot study and receive appropriate medical care.

Health is a crucial area of study. Health is existence. Awareness of health is important. A person has to read journals and listen to the media to keep up with this very accelerating field. Look at all the research which has shown the pulmonary changes leading to cancer in smokers.

All facets of health are important. No one area is more important than the other. Mental health has an influence on the physical health too. A lot of psychological research has been done on the heart attack victim. When I had my stroke, I experienced some depression. In order to recover from the stroke, my head had to be on straight as well!

Because of all the 'suffering' I had to endure putting my son through medical school, I passively learned about different medical topics through TV and books. The regular TV channels really do not provide much education of any kind. Channel 7 or 11 on the cable network deals exclusively with educational topics. Being close to the university, I have taken an interest in the artificial heart program. I also donate money to the School of Medicine for the Organ Transplant Program. I read Time magazine weekly especially the health section. National Geographic deals occasionally with environmental health issues. Architect Digest has articles on the environmental structure of buildings in relationship to promoting good health. The articles discuss proper remodeling features for wheelchairs, building codes for dealing with this remodeling (such as having proper door clearance and proper ramp angles).

To be honest, I have only looked at The Enquirer once in the airport. I really don't seek those papers out! This question is interesting because the TV news revealed some sensational points of interest. A physician in California has had success in treating various back problems by injecting hydrocortisone and morphine directly into the spine. This affected me personally since I have such a bad back. The medical profession, according to my son, states this treatment has no valid published statistics. This is a sensational news item which bears no credible use. This story is

interesting because it was broadcast nationally by the TV media. I naturally thought it was a genuine treatment. After discussing the topic with three other MDs besides my son I decided otherwise. This demonstrates that The Enquirer is not the only sensational news piece. For this very reason, the questioning of health information becomes important. Where there is a buck to be earned, people will attempt to make a profit whether it be clear or shady. The liability is an endorsement of capable people like physicians and dentists who must screen the competence of their own profession. The profession reprimands accordingly in order to update the profession.

Second opinions are an important option but unfortunately people do not exercise the option as they should. Although I see an orthopod for my back problem, my wife thinks I should see a neurologist. I will ask my son for his fresh opinion. A friend of mine had back surgery and now plays golf everyday. Another friend had similar surgery and feels horrible. Sometimes your friends can be your worst enemies.

When I feel sick I treat the minor things like a cold with steam, fluids and aspirin. After 3-4 days, I will call the doctor if I still feel bad. Antibiotics are of no use in a viral cold. They only delay the problem. I keep in close contact with our family physician. He is our referral point should we ever need other consultants. This is a good set up because all the physicians involved with me communicate with the family doctor. All concerned physicians cannot pass the buck with this set up since everyone is informed. More people should adopt this practice to facilitate coordination among physicians.

As a child, my mom would stir up a mustard plaster to place on the chest to draw out a congested chest cold. Honey and whiskey is a dandy combination for coughs. It will kill anything!

Balanced diets are the best route for vitamins and nutrition. If a physician diagnoses a deficiency of iron or potassium, then supplements are available. Eating certain foods like bananas can even provide sources of potassium. The only healthy-type foods my wife fixes are bran cereals and malt-o-meal with bran sprinkles. These combinations also keep the bowels moving!

Over-the-counter medications can be found everywhere these days. I never was much of a pill-taker. Before my stroke I would buy some Coricidin at the grocery store for hay fever and have aspirin on hand for colds. I am now on so many medications that I do not know if I am coming or going!

A medication is a material taken by mouth or absorbed through the skin (topically or by injection) to alleviate, relieve or prevent complications involved in a medical problem. Medications are not addictive.

Isaac Walton (continued)

Drugs are used to affect the sensory elements of the body to give relief from pain and stress on a temporary basis. If properly used, drugs play a definite function in medicine, otherwise they are highly addictive. Drugs are not medications like Tylenol and aspirin. Drugs include Tylenol No. 3 due to its addictive nature (even though it is medically legal) and members of the dope family (amphetamines, speed, marijuana).

Vitamins are medications but do carry the risk of overuse. They are not addictive. I subscribe to a newsletter for the aged and it has advertisements page to page for vitamins. The American people are real suckers for this. Vitamins should only be used when a deficiency has been diagnosed even in the presence of a proper diet.

Medications which are available to the public are safe to use provided the consumer does not overuse or overdose on the product. This situation becomes the consumer's fault and not the drug company which provides adequate directions on the label.

When I do begin to feel ill, I usually ask for advice from my wife. Most of our health problems like colds we get from each other. We respond well to each other's ideas. I never ask my friends for their advice. Even if my friends or family is using some new medication I will stick to my aspirin and fluids routine or otherwise call the doctor. Even though my symptoms may seem to be similar the underlying condition may be very different. I do not discuss politics, religion or medications. If I see my doctor at a party and wanted to ask him a question, I would just tell him that I will give him a call in the morning.

A medical doctor or physician is knowledgeable in broad basic concepts concerning medical problems. He/she analyzes these problems and if a competent decision is not reached, the doctor will refer the patient to another more specialized area of medicine. A doctor knows the patient's bodily systems, and his heredity. The doctor attends various seminars around the country to keep abreast of all the changes occurring in medicine.

My family physician will talk about medications as long as I talk! A good physician must have a willingness to talk and listen. Many doctors lack in any type of bedside manner. I find it aggrevating! Bluntness serves no role in health care!

Although the rehab doctor only spends five minutes with me discussing my medications, one has to keep in mind that the system is different in this hospital. The patient is served by a medical team where each unit of the team serves a special role. They evaluate and correlate their observations and information to improve the health status of the patient and learn together in the process. Medicine is a team effort. The doctor only prescribes and examines the patient.

Isaac Walton (continued)

The conversations which I have with my rehab doctor are interesting. I enjoy the honesty and frankness shown because each breeds confidence. My wife had an experience at an LDS emergency room where the doctor showed her absolutely no respect. He acted like she had 'really put him out'.

The pharmacist works with the doctor as a consultant on medication use. Some pharmacists specialize in certain areas such as cardiovascular drugs. Although the pharmacist cannot actively prescribe a drug, he/she can have input before the prescription is written to assure the proper drug, dose, or combination is used. A pharmacist is a guardian of medication. The pharmacist may also recommend over-the-counter medications which may be helpful to the consumer. If the pharmacist suspects a more serious problem, he/she will direct the consumer to a physician for proper examination and care. The physician has only told me what a drug will do in my body. The pharmacist, especially the one who rounds here on rehab, give the best report on medications than any other individual in this hospital! We discussed the name, dose, side effects, directions and reviewed it on a special education sheet provided by the pharmacy. It is great! I like to understand! The pharmacy input here gives me great confidence in the profession and how it is affecting me, the patient. Both the doctor and pharmacist have been good to answer my questions but the pharmacist is the best educator for the patient. The University of Utah College of Pharmacy is one of the top schools in the nation!

Tylenol No. 3 is a drug which I have used once in awhile. It is a moderately strong pain killer which can be addictive. It is a legal drug and is not considered as dope. Dope is illegal and tends to make a person feel good in the head. My rule of thumb is to take only the medications my doctor prescribes for me, avoid aspirin (since it throws off my Persantine dosage) and guaiac all stools to be sure my blood is not becoming too thin.

Although I find the pharmacist to be highly professional, factual, and confidential, I prefer to check with my doctor on questions concerning a new medication since he prescribed the product. I will then ask the pharmacist questions at the time of filling the prescription and between the clinic visits. I like to ask both parties about my medications because it helps me learn and feel reassured that all my pharmaceuticals are in a proper balance.

On this list, aspirin is used to treat mild pain and fever. It is also a mild blood thinner in small doses. Milk of magnesia is used to cure constipation. Alka-Seltzer can be used to treat heartburn or colds. I have not heard of Zantac or Dibenzyline. The questions which I like to ask about a new medication are: What is it? How do I say the name? How does the drug work in the body? Why do I have to take this drug (to relate the action of the drug to my symptoms)? How do I take it? How long will I be taking this

Isaac Walton (continued)

medication? (I like this last question because some people quit taking their antibiotics too early.)

BF = Bill Fontana

BF is a 37 year-old white male who was involved in a motor vehicle accident which caused a L-3 fracture with resulting lower extremity paraplegia. BF's hospital course was complicated by a right pneumothorax and pneumococci pneumonia which have since resolved. BF is a high school graduate and attended junior college. He was working as a freight dispatcher at the time of the accident. He has a history of Dilaudid and ethanol abuse. BF has been married for ten years and has two children.

Visiting the doctor is not a common occurrence in my family since we are infrequently sick. My wife and I or my children may see the doctor once every other year to get a cold prescription.

Health is a mental state of well-being. The healthy mind allows the body to function accordingly. Health is more a condition of mind well-being than physical well-being. This pattern is conducive to the promotion of a healthy body. When I think about health I also think of the health courses which I took in the third grade in the textbook sense. A healthy person can participate in many activities of interest. The actual participation is not the important element. The person has to be satisfied with his level of performance or realize the degree of progress he must achieve to become satisfied. Even though the person's performance is not optimal, he may have reached a level of satisfaction which will enable him to better understand each stepping-stone of his progress.

Health is a very important area of study. The topic can be extremely complex to study so a person may need to concentrate on smaller portions in order to learn the basics. Stress is an invisible invader of the body. By studying the components of stress and its effects on the body, a person can devise better treatments to allow the body to recooperate.

Some of the main areas of good health include proper nutrition, exercise, and physical evaluations of body functions through yearly physician exams. No one part is more important than the other part. If one area is emphasized more than the other parts, those components will become weak. The area which is being emphasized will never reach its full potential as a result.

If I wanted to learn about a special disease I would visit the hospital medical library to read specialized books. Asking a specialist in the area of this disease (such as an epidemiologist) would provide even more information. I would utilize the same channels even if I had the disease personally.

Bill Fontana (continued)

Learning about health can be an enriching experience. Channel 7 is a cable educational station. Recently a program was devoted to the functions of the separate hemispheres of the brain. A person develops a better appreciation for the body's complexities. The Nova health programs are always educational. These programs deal with nutrition and exercise. I am not especially interested in reading magazines but I do like to read health books. My library at home includes a current volume of the Physicians' Desk Reference.

Newspapers like The Star are trash. I have scanned a few of the articles and found them to be highly sensational and a product of poor journalism. The authors have no credibility to back their already poorly written articles which lack any scientific basis.

I feel competent in treating my own minor ailments. If I have a cold I usually only use Actifed to cure my symptoms of runny nose and congestion. It is hard for me to speak in generalities on the treatments of symptoms with over-the-counter medications. It depends on the person, the situation, the degree of the symptoms versus the person's tolerance level. A person may really never have the same symptom twice due to these considerations. If a friend experienced symptoms which were similar to mine, I would recommend my OTC drug to him. The decision to buy and use the medication is left up to my friend.

The doctor's main function is to treat illness. My impression of most doctors is not complimentary due to their lack of being informative to the patient. Doctors do not make an effort to get to know the patient personally. This lack of personalization hinders the doctor to really know what goes on at home versus what the patient discusses in the clinic. I move around the country and know for a fact that doctors do not make this effort. This lack of personalization is reflected in the cut and dried conversations carried on between the patient and doctor. The disease and treatment are discussed but the patient really has no input. If input is given, it is not considered in the final treatment plan.

From my experience, the amount of time spent by the doctor discussing medications depends on the specialty. Orthopods spend exactly zero seconds on medications. The rehab doctors spend about five minutes. The name and action of the drug are discussed without any reference to side effects or contraindications. Doctors have various reasons why they choose a certain medication to treat an ailment. All doctors may not necessarily agree on the type of treatment.

When learning about a medication, I would initially like to learn about the drug from the doctor since he prescribed it. The doctor tends to be poorly versed in the area of drugs since he relies on the PDR so much. If I am not satisfied with the doctor's response,

Bill Fontana (continued)

I would definitely seek out the pharmacist. The pharmacist has more exposure to various drugs and can discuss more various details such as drug interactions with the patient.

The main role of the pharmacist is to dispense and provide the medication to the patient. His role has become even more informative since the public now learns about various OTC drugs, side effects and when to avoid using OTC drugs. The pharmacist on rehab are sparse since they are in the pharmacy. The pharmacy residents and clinical rehab pharmacist tend to dispense more information than drugs which is helpful for the patient. The term druggist is one that I had not thought of for years. It is an outdated term for the term pharmacist. Since the pharmacist tends to provide more direct answers on medications, I would tend to contact the pharmacist about a question I had before starting the prescription. The pharmacist is also more accessible than the doctor.

Tylenol No. 3 is a drug to which I have had a lot of exposure. It is a narcotic drug used to relieve pain, fever and inflammation. The codeine can cause a lot of side effects while relieving the pain such as respiratory depression and constipation due to its antispasmotic qualities. Too much acetominophen can be damaging to the kidneys.

On this list, aspirin is used to relieve headaches and swollen joints. Milk of magnesia is used for constipation. Alka-Seltzer treats an acid stomach while Colace is a stool softener. I have not heard of the other two. Important questions which come to mind are: What are the long and short term side effects? Why is this drug so special that I have to take it? What is the name of the drug and what are its active compounds? Is this a brand name drug. What are the directions? How is the drug eliminated? What is the half-life? I am always concerned about drug accumulations.

Expert advise from the doctor should be sought for any strange never-before-experienced symptom. An appendicitis or a fractured bone requires medical attention. I would tolerate normal body symptoms such as a stomachache for two days and a cough for one week. My family tends to buy aspirin and various antacids in any cheap drugstore. The sap from the aloe vera plant is helpful to heal minor cuts and scratches.

My sister owns a health food store. We tend to buy nuts, figs, dried fruit, sunflower seeds, separate vitamins of C, B and calcium. Health foods are not required for everyone to eat. The key is to have a balanced diet. If I lived in California where fresh fruit is so plentiful, I would tend to eat less health food. In Nevada where fresh fruit is expensive and difficult to select, health foods become a good substitute. Health foods give variation to the diet in a balanced manner.

Bill Fontana (continued)

Advertisements for new medications do not influence me because I do not believe in taking medications. A person requires a need for the drug to treat. If a person lacks a condition to treat, medications are of no use. In order for drugs to work, the person has to be aware of how these drugs act in the body. The person may have had a bad experience with drugs before and may associate this experience to be true with all drugs. Health is a concept of mind over matter. If the mind has a bad attitude concerning the drug, it may act as a gate to prevent the drug from actually performing its action in the body. The beliefs which a patient holds are an important aspect of health care to improve communication between the health care team and patient. Certain beliefs held by the patient may actually prevent or enhance the drug's action.

Since I am not one to take medications other than aspirin or antacids, I only would tend to contact the doctor for bad symptoms.

Medications are a subcategory of drugs. Medications help the body to correct a deficiency or relieve pain. Medications do not cause a chemical reaction but do attack foreign bodies which are causing the symptoms. Natural products like aloe vera which is a natural catalyst to aid healing is not a medication since it is in the topical form and works outside the body. A drug is a compound which is ingested or injected to actively change the body through chemical reactions. Amphetamines are drugs.

Vitamins are neither a medication nor a drug but rather a food product.

Over-the-counter medications are safe to use on an occasional basis for a nonserious ailment. If the body is provided with vitamins through a balanced diet and rest, the body is able to act on its own to recover. If a person uses medications on a chronic basis, or in the overdose situation, the body becomes poisoned chronically or acutely. This is due to the side effects of the drug. Aspirin is hard on the stomach and kidneys.

HB = Harris Brinkley

HB is a 53 year-old white male who was injured in a motor vehicle accident 20 years ago and sustained a C-7 quadriplegia. After initial stabilization, HB had a benign hospital course and has remained relatively healthy for the past several years. He has been divorced for the past five years and has no children.

My cousin is a registered nurse. She is the only one in my family who wanted to work in the health field. I did not have much association with doctors before my accident either. The only conditions that would force me to see the doctor were seasonal asthma and anytime I felt just plain sick! That all changed though

Harris Brinkley (continued)

after the accident. I see my rehab doctor and my regular doctor each once every six months.

Today I am no different than before my accident. The only difference is that my present condition slows me down and has changed my lifestyle somewhat. My daily life is somewhat more regimented for taking medications. My activities have not been curtailed at all. I did have to give up deer hunting but that is a small sacrifice.

Health is an important topic. By reading and learning about health, a person can learn the signals of the body which translate as symptoms to the person. Symptoms are the body's language which may require medical advice to translate or interpret the language into understandable terms for the patient.

If a person really wants to learn the full details on a disease topic, he should just ask the doctor. This is an easy, direct and usually up-to-date approach. I would still want to discuss the topic with my doctor if I had the disease since the personal influence of the doctor is important.

Some of the important topics in health care to consider include medications, catheter care and irrigation care. If a person does not know how to care for his body, he may become infected, irritable and confined to bed. During the past 20 years, I have only had one urinary tract infection which shows how important personal hygiene can be.

Watching movies on television may teach a person some interesting points on health care. I watched "Other Side of the Mountain" which is a story about a female skier who becomes paralyzed in a skiing accident. Seeing the dedication and will which gave her strength to overcome her handicap may allow others to strive for goals which they too thought were impossible. Another way to learn about health is by watching the health channel on cable. This channel network provides a lot of education to the viewer. I have learned about symptoms which signal an oncoming cold; how polio can cause paralysis if certain symptoms are not detected early; the relationships which viruses play in the common cold.

My reading interests include Time, Newsweek and Reader's Digest. The only magazines which really deal with health problems are those found in the doctor's waiting room. I have read about various diseases and the symptoms which are commonly associated with those diseases.

One area of health research which still needs more attention involves the use of wheelchairs. I would like to see some publications on what to do if a person's wheelchair gets into a predicament and the possible solutions which may be tried. I like

Harris Brinkley (continued)

to read case reports of other people's wheelchair problems and how they solved them.

When a person reads about health news, he has to be careful since magazines even newspapers like The Enquirer tend to stretch the truth. I usually accept it at face value until I hear or see the topic mentioned in the national news media.

Second opinions are an important option of health care. I like to see doctors share medication information and state similar conclusions. This gives me more confidence in my diagnosis. I rarely have to doubt my doctor's conclusion because he has so much experience to rely on. My doctor also trusts the confidence which I place in him. It is a two-way relationship.

My medications are balanced according to certain dosages, times and combinations according to my doctor's prescription. I do not take any other medications outside his advice. Taking other medications would only cause interactions with my regular medication.

Health foods may do more harm than good in spinal cord patients since the foods may interact with medications. Labels do not give enough information on what the product will do to the body. I would only use health foods if my doctor recommended them. I would rather eat protein in the form of a fat juicy steak than with health food.

The only time I would consider taking an over-the-counter drug is if the present OTC drug was not doing the right action in my body. I would be game to try a new OTC drug if my doctor also agreed with me.

A medication is something which is taken for a type of condition. One type of medication is Renacidin which is a bladder irrigant. It prevents stone formation and infection in the bladder. Not all medications require a prescription. Examples would include over-the-counter medications and normal saline. Vitamins are also medications since they help relieve colds (Vitamin C) or a deficiency in the body.

Drugs are also medications but tend to have a more addictive quality. Valium is an addictive drug.

Over-the-counter medications are safe to buy but the consumer tends to buy these products blindly. If a person had high blood pressure and takes an OTC drug of his choosing, he may develop congested heart failure. By considering the doctor's advice, a person can hopefully avoid these interactions.

When I feel sick I call my doctor for his advice on how I should treat myself if at all. If more members of my family had medical backgrounds, I might consider their advice.

Harris Brinkley (continued)

People tend to think that everyone experiences the same types of symptoms. Since no two bodies are identical in physical functions, medications tend to act differently in each body. A medication may work for one person and not for the other.

A doctor runs tests to pinpoint the diagnosis. He writes prescriptions for medications to treat the illness. He asks the patient to come back to the clinic so the doctor can check on the patient's progress.

My doctor spends about ten minutes on each new drug I take. He tells me what the drug will do inside my body, how it differs from my other drugs, and side effects. We also have a session on big words that come up in the discussion. I always have plenty of time to ask questions. Sometimes the answers are not understood by me so the doctor will rephrase the answer for me. A patient should not be afraid to say that he does not understand. What good it he conversation if a person cannot understand it.

The pharmacist plays a big role in health care. He fills the prescription according to the doctor's directions and types proper labels for each drug. The pharmacist will sometimes even talk the customer out of buying a certain over-the-counter medication if he suspects a more serious problem. He recommends that the customer visit a doctor to check this problem. I have always been satisfied with their advice. I have gone to the doctor several times on the advice of a pharmacist and discovered that the diagnosis was just as the pharmacist stated.

On the rehab floor, the doctor is the most helpful person to provide me with medication education. The charge nurse is the second most helpful person. She actually sees the symptoms which I may have from a drug and promptly reports them to the doctor. The pharmacist is the third most helpful person. I would have ranked the pharmacist higher but to be helpful a person must be present. The pharmacist is a scarce person on the rehab ward. The pharmacist however is the best prepared person to discuss medications with the patient. The pharmacist is able to provide information which the doctor cannot. He knows the various differences between drugs. He knows how generic and trade name drugs differ. He understands how certain drugs of the generic line can be substituted for a brand name drug. The pharmacist has also studied drugs more carefully than the physician. The doctor and nurse have some education on drugs but the pharmacist is more qualified to teach patients due to his expanded drug education. The pharmacist knows everything about drugs. The doctor knows more specific information about me the patient. Hopefully they can work together to devise the best drug plan for me by sharing each other's information.

Harris Brinkley (continued)

The pharmacist provides the same information as the doctor but includes more detail. He talks about the name, action, side effects and directions. I always want to make sure that I understand the directions with the pharmacist.

I really can't describe a personality of a pharmacist. I have talked with so many who have helped me. I usually see a pharmacist once every two months for refills. I also enjoy his handy mail-in service when I cannot see him.

When I first started to use Renacidin solution, I was confused on the actual preparation of the solution even after talking to the doctor. I called the pharmacist and he set me straight on everything.

Valium is a drug I use everyday to control muscle spasms. It relaxes the muscle tension to make the spasms cease. It has no side effects. I would like to know what other types of muscle spasms it relieves. Since I know how Valium benefits the spinal cord population, I would now like to know general knowledge information for a better overall picture.

When I have to learn about a new medication I really prefer to learn about it from the pharmacist since he has the best qualifications and education. The pharmacist also has more time than the doctor and can sit and discuss the drug with me. I feel more confident in the information which the pharmacist gives me than the doctor because the pharmacist is aware of the latest data about the drug.

I know that aspirin is used to treat minor aches like a headache. Alka-Seltzer treats gas problems. Milk of magnesia is a good choice for someone in need of a laxative. I have heard of Colace but do not remember the action. I have never heard of Zantac or Dibenzyline. If I had to take one of the unfamiliar drugs, I would want to know the action of the drug, side effects and precautions. The name of the medication is also important to know to avoid errors at refill time. If a different pharmacist is filling the prescription, he would at least know what the person was talking about. The strength of the medication is just as important as the name of the drug since many different strengths may exist.

PF = Peter Franklin

PF is a 37 year-old white male who was involved in an accident where a 1500 pound bag of cement fell on his back while loading a truck in September 1984. The accident resulted in a T-12 paraplegia. After surgical stabilization, PF's hospital course was uneventful. He is a high school graduate, married, and has three children. PF has taken

Peter Franklin (continued)

some classes in electronics when he has not been hauling cement interstate.

My cousin is the only person in our family who works in the health field. She is a nurse who works in a hospital and also teaches nursing students.

My visits to the doctor have been more frequent in the past few years. Being a trucker, I have to get a physical exam once every year. Before I started driving truck, I was lucky if I saw the doctor once every two years.

Health is a state of physical and mental condition. The activities which a person can participate in depend on his interests, and current health status.

If I wanted to learn about a disease I would refer to our general encyclopedia, the medical dictionary or the family medical book which is a mini-health encyclopedia. If I was still curious about the disease I would call my doctor who could then direct me to different areas of information. If I personally had the disease I would do the same information search but I would rely more heavily on my doctor for diagnosis, treatment and guidance.

I enjoy learning about the progress in science and medicine. I recently watched a show on TV which described larynx cancer in a Japanese population. These people ate a lot of chicken which had a magnesium deficiency or toxicity. This show held a personal significance for me since my mom died of cancer. I like to watch the results on television rather than the gore necessary to derive those results!

The magazines which I read include Field and Stream, Outdoor Life, and various hunting magazines. Any health articles usually stress the importance of being in good condition especially during the hunting season to track deer. The health tips are usually very general without detail.

While waiting in the grocery store line, I have browsed through a few Enquirer articles. I think it is important to at least be aware of the information which other people are reading even if the information is a sheer conversation piece. If the articles are truthful, (I have only read the front page leading articles.), the same information should be found in other leading news magazines as well. This would give more credibility to the article. I think people should be aware of this information and question it. If the information is true, there will be no problem verifying it with proof. This is also true of medical opinion. If a patient is not satisfied with a diagnosis or treatment, he has the right to two, three, four or more opinions. The consensus of the opinion will give the patient more confidence in his diagnosis or treatment.

Peter Franklin (continued)

The only symptoms which I treat include the runny nose, cough, sore throat and congestion of the cold or flu. I generally treat myself with Alka-Seltzer for colds or plain aspirin. If high fevers are present, I would call the doctor after one or two hours if the aspirin did not break the fever. Otherwise I would probably let the cold symptoms go for three days before calling the doctor. The products which we buy for colds at the large grocery-type drugstore are usually bought the second time if they pass the trial and error test.

The only health foods which I have bought are Vitamin C with rosehips. Rosehips is a natural food product. I believe in natural food but not health food. Natural food is fresh out of the garden having never been sprayed with chemicals. Natural food also includes freshly killed meat.

My grandma used to make a natural medication for sore throats. It was made out of a combination of honey, whiskey, and lemon.

My family and I have visited the same drugstore for 16 years. We know the pharmacist very well. I trust him like my doctor. I feel free to ask him on various OTC cold products and their ingredients and how my symptoms might be relieved. He is very trustworthy and would never recommend a product if he thought I had a more serious condition. The only difference between a pharmacist and a doctor is that the pharmacist cannot write prescriptions. The pharmacist is an excellent educator of patients.

Whenever my regular OTC drugs do not relieve my nagging cold, I would be tempted to try a new OTC cold product. Once I find a product that works, I stick with it. The ways that I learn about a new product are through the now very effective means of advertising, especially on television, by word of mouth from friends since everyone gets those nagging colds, and by learning that a medication does not cause drowsiness. As a trucker, I cannot afford to be drowsy.

A medication is given orally or externally to maintain good health after being sick. The category of medication is very broad and includes the subcategory of drugs. I take medications but not drugs. A drug falls into the narcotic description. Vitamins are not drugs but may be medications depending on the situation. A balanced diet provides vitamins in a natural way. If a person has a deficiency and requires a supplement, the vitamin becomes a medication.

The medications on the market are safe to take because they have passed the requirements of the medical association. Problems may arise though for the person who is not well informed on over-the-counter medications. If a person is already on a medication with stimulating properties and takes another medication with depressive properties, interactions may occur. A person

Peter Franklin (continued)

should always check with their doctor for permission to use an OTC drug when the person is already taking a prescription.

If I though I was becoming ill, I would seek the advice of my wife but not necessarily take it. If a friend gave me his OTC remedy, I would consider trying it if my old standby was not helpful to relieve my symptoms. If it was a prescription, I would only write the name of the drug down to ask my doctor later. I do not believe in taking others' prescriptions. Over-the-counter medications especially the products for colds do not cause serious side effects but a consumer still must use care. Everyone is responsible for their own actions.

A doctor makes diagnosis and treats illness. He is a family doctor to treat minor scrapes and scratches, the colds and flu. He is a technical doctor for treating damaged hearts and other vital body organs.

My doctor spends long enough with me discussing my medications and reinforcing what I have learned. When doctors are not paid, they tend to spend less time with the patient. He usually discusses the reason behind me having to take the drug, how long I will take the medication, the consequences of not taking the medication. My doctor makes it quite clear to me that if I ever have any questions to just give him a call. My doctor has been very patient with me. I sometimes have to ask him many questions to discover what my real question is.

A pharmacist fills the prescriptions which the doctor writes. He answers patient and doctor's questions on medications due to an expanded drug knowledge. He does not write prescriptions. The pharmacist usually talks to me after the doctor has had his medication discussion. The pharmacist wants to be sure I understand my medications. The pharmacist knows as much or more than the doctor concerning medications. The pharmacist explains the directions, the consequences of taking too much or too little of the drug, duration of the treatment, med versus self-med program, and whether the doctor has to be called before a refill can be given. The pharmacist also tends to talk in more reasonable terms due to working with the public on a more regular basis. A pharmacist and druggist are identical professionals. Whenever I have discussions with the doctor or pharmacist or nurse, I will interrupt the conversation if the topic is a heavy one to ask on terms. If the conversation is light, I will look the terms up myself.

The doctor tends to be the most helpful about providing me with information about my medications. I am sure that the pharmacist would be even more helpful to me but he is never around. The nurses are helpful for me to learn the administration times of my medications. Even when I was home, I would tend to call my doctor

Peter Franklin (continued)

first if I had a questions on a new drug since he wrote for the drug in the first place.

Percocet is a drug which I use to relieve pain. I really do not know much about it other than I take one tablet occasionally for pain. I would like to know if it is stronger than Tylenol No. 3? How does it work to relive the pain? It makes me nauseous. Why? I do know that it has the potential to be habit-forming if used improperly.

I think it is important to ask questions about medications to be well informed on the effects of drugs. One night on '20/20' on TV, the topic being discussed was that of drug use in the elderly. The elderly person may have many different unrelated health problems and he takes several medications. Each medication has its own set of side effects. More drugs may be given to treat the side effects but end up causing even more side effects. My roommate at the time was an elderly gentleman who refused to take his medications after watching the telecast.

Aspirin is used to treat headaches and minor aches. Alka-Seltzer treats the same problems plus upset stomach. Milk of magnesia is a good antacid. Colace is a stool softener. I think it is very important for a person to know the names of their medications. This demonstrates that a person has some degree of intelligence and may prevent having a wrong prescription filled. Colace and Coumadin have confusing names to me. I have had to take extra time to learn the names. Getting diarrhea will not necessarily keep my blood thin!

I would like to learn about my medication from the doctor initially and then from the pharmacist more specifically.

MP = Margaret Pierce

MP is a 45 year-old white female who has a diagnosis of paraplegia secondary to a recurring meningioma which has caused spinal cord compression. MP has a long history of medical problems which began in 1955 at the age of 16 with the diagnosis of polio. In 1956, she experienced progressive weakness of her lower extremities and had difficulty walking. A meningioma was diagnosed and resected. In 1965, she again experienced lower extremity weakness which progressed to complete paralysis. The meningioma was again resected and cobalt radiation was started. This process repeated itself in 1968. MP has also had a hysterectomy for fibroid tumors, one episode of nephrolithiasis and surgical repair of vaginal decubitus ulcers. MP is married and the mother of two daughters. She has since retired from her occupation as an art and graphics instructor in a junior high school.

Margaret Pierce (continued)

My family is full of health people! My mom was a nurse's aid for 12 years. I had one great-grandfather and four great uncles who were medical doctors. I have four cousins who are doctors. One of my cousins is a dentist. Several other cousins are nurses too!

As you probably know my health history is very involved. Before the age of 15 years, I would only see my doctor for childhood illnesses such as chicken pox or colds. Over the years, though, I have had to see my various doctors several times each year.

Health is a physical state of well-being. Everyone has a health baseline where they know how they feel. If things are not going well, a person may know that something is wrong before he even sees the doctor. If I feel bad, I know how far I can go with symptoms before calling my doctor.

When I want to learn about a disease I usually check the World Book Encyclopedia which has some excellent transparencies to understand the body's anatomy. My library also has a pocket size book on diseases. I also have a first aid book and several nursing books. If I still need more information, I will just go to the library to read more medical books. My mom worked for years in the hospital so she would probably have some suggestions too. I could also write to different foundations to have literature sent to me.

If I personally had the disease, I would talk to my doctor to explain it to me in layman's terms to aid my understanding. I am naturally curious and like to learn. When the doctor thought I had diabetes, he provided me with tons of literature to read about the disease. I really appreciated this even though this was not the diagnosis after several tests were completed.

Health is the most important part of a person's life. I had a health class in junior high school but I was too young to realize the significance of the topic. If I would have been informed at an early age I would have sought help from my mother and doctor. I had difficulties in urination. I would trip and stumble. My headaches were so terrible and yet I hid all these symptoms from my mother and I even lost weight. One day after swimming in the pool, I realized that I could not walk. I felt sick and wanted to just stay in bed. I still did not tell my mother how I felt. There had been a polio outbreak in the ward where my mother worked but my symptoms did not match the other patients according to my mom. The doctor took some serum from my spine and said that the picture did not quite fit that of polio but that it probably was polio. A spinal tumor was also diagnosed shortly after that time.

After I was married I still did not really understand the important elements of good health. I was a junk food junkie growing up and I passed it on to my children instead of giving them celery and carrots.

Margaret Pierce (continued)

Besides doing extensive reading on the subject of health, I also like to watch the health channel on cable. I recently watched a show which discussed the functions of the human body and how they were interrelated.

I also like to read Health Today which has interesting ideas on how to make the diet more healthy. The magazine also discusses new uses for honey, bee pollen, aloe and papaya juice.

My mother has sent me a few copies of The Enquirer. I have read some miscellaneous articles on the use of the copper bracelet to prevent arthritis attacks and various new cancer treatment discoveries. If a person wants to try one of these new treatments, he should really consult his doctor. When I was in a medical equipment store, the manager told me about a new jelly material for ostomies. I did not try it because I wanted to ask my doctor about it. He said it was pure crap and not to waste anymore time on that idea. Light and fresh air are the best treatments.

Questioning the health treatment which a person receives is very important. I always have to be sure that the medical team has received the same information as the doctor told me. My doctor does not want me to move around much when I have these bed sores so healing can occur. The staff continues to move me so I have to lay a few rules down. A few years ago, a nurse asked me to sign a paper for the removal of a chest bone. I went to the clinic for a simple urinalysis! Thank goodness I questioned the nurse about this form because she thought I was Mrs. Johnson! My aunt recently had surgery for her varicose veins and she told me the doctors removed her entire leg. This may be true but does not sound logical. I will have to question her further on this matter.

Second opinions are another vital part of health care. I have only sought a second opinion once in my life, since I usually have faith in my doctors. A few years ago, I started to have menses about five times during the month. I discussed the problem with my internist and he more or less just held my hand. After having no success with other doctors, I consulted an emergency room doctor who later discovered a uterine tumor! I seek a second opinion only if I think I have been getting the run-around. Since I have known my doctor for several years, I think it is important to stick with that person and develop a trustworthy relationship.

When I feel ill, I always take my temperature. If it is 99-100°, I take aspirin and fluids. If the fever does not break after a few hours, I will call my doctor. When I was young, I tended to buy over-the-counter medications. Now I think OTC products are dangerous since the consumer does not know enough information about them. I have several allergies in the form of tachycardias and palpitations and have to be careful about the medications I do take. My mom has recommended some old home remedies which are

Margaret Pierce (continued)

worthwhile. For sore throats, gargle with salt water or drink honey and lemon. Pepsi may be helpful to relieve a headache. Baking soda in the bath can relieve itches.

My family tends to buy aspirin or Tylenol for colds along with Contac or Actifed. We buy Nyquil but it is really only alcohol. Robitussin is good for coughs. I know that aspirin is aspirin but I always buy the Bayer brand. Some of my headaches are probably cured by my psychogenices...thinking that it just has to be Bayer to work! These medications were recommended by the doctor, my family or the pharmacist.

Over the past few years, my family has developed tastes for more healthy foods. I buy bran cereals, wheat germ, yogurt and squaw bread (whole wheat bread made with molasses) to keep the bowels loose. I also grind whole wheat to make my own bread. 'Honey Nut Raisin Bran' and 'Wheat Hearts' cereals are also very good for the diet. We have tried these products on the recommendation of friends and family. If people desire to eat health food, it is a personal choice. Health foods do cost more. A person can eat a balanced diet and still benefit from the nutrition to which health foods claim fame.

My family generally buys the OTC medications at a department store type pharmacy. If someone like a friend asked me to try a new OTC salve for a cut, I might try it. I only take the oral medications which my doctor prescribes or recommends. I do like to try samples before buying a regular prescription since all medications may not necessarily be helpful to everyone. My daughter has switched to Panadol after the Tylenol scare even though the two products involve the same ingredient. Some people never trust the drug company again.

I think it is important to watch the packages which drugs come in. The same applies for some foods. The grocery stores are getting into this bulk idea. I think it goes along with the natural food kick. A person could walk by and drop anything into those barrels! Kraft is the only maker of salad dressing which provides a plastic seal on each bottle. We also do not buy fruit such as watermelon which has already been sliced at the store. Who knows where the knife has been! I am also very much aware of the labels which list ingredients and chemicals. I learned this from a Seventh Day Adventist friend.

A medication is a drug which a person takes when feeling poorly in order to feel better. Vitamins become drugs when a person over-indulges in them. Vitamins are a part of a balanced diet and do not become drugs unless they are used maliciously.

Medications are safe to buy on the market provided the consumer has the recommendations of the doctor or pharmacist. Benign drugs such

Margaret Pierce (continued)

as Vaseline may cause death when not used properly (suffocation of a baby). Mentholatum rub burned a baby's throat recently in the news. I used to keep drugs in my purse until my children got into my purse one day. I had to take them to the emergency room and have their stomachs pumped out! Medications are safe but not in the hands of my children.

When I am feeling sick I use my own advice. If a cold lasts over one week, I will call my doctor. If my temperature stays elevated over one day, I will surely call my doctor since I may have a urinary tract infection.

My mom tries to get me to use her medications but I do not believe in sharing medications. Even though symptoms may seem to be identical, two people may have totally different problems. I am afraid to use unfamiliar drugs. Years ago, I was given a drug after surgery. My spirit left my body and stood at my bedside looking at me. People should also be educated on the meaning of 'prn'. I only take my prn Darvon when I am in need. It takes the body a long time to return to baseline and may lead to a dependency problem.

A doctor tries to help the patient figure out solutions to health problems. The doctor and patient are a team and each one depends on the other to be honest. The doctor prescribes medication, communicates to the patient in layman's terms and follows the patient with regular clinic visits. The doctor is a scientist and requires much patient data to determine solutions to health problems. I hate a doctor who watches the clock.

When I was small, I was afraid of having symptoms because that meant I would have to get a shot and might be hurt. I did not like to show my body to anyone. The medical language was so hard to understand especially for a child. When I was a child the fear of multiple sclerosis was as prominent as the fear of polio. When I had to have cobalt radiation at such an early age I felt that I would become deformed and not able to bear children.

My doctor spends about 15-30 minutes discussing my medications as a group. The conversations are interesting since the doctor explains the medical terms. He discusses the action and side effects. I keep a pen and paper handy to note questions which may develop between doctor visits. The only thing I do not like about some doctor conversations is the 'I know more than you attitude'. I think this is a real barrier to communication. I know that some doctors do not like to tell the patient the side effects of the drug because the patient will go home and develop the side effects all at once. There has to be some degree of trust in a relationship.

Margaret Pierce (continued)

A pharmacist reads the prescription from the doctor, fills it, and explains it to the patient. He explains the name, action, side effects, warnings, refill directions, general directions and cost. The pharmacist which our family sees on a monthly basis is very interested in my health. He will let me know when a new generic product comes on the market which is like my name brand drug. He tells me to let my doctor know about it. He lets me know which generic has a poor record and should not be substituted. I appreciate it when a pharmacist tells me about any color changes, price changes and the availability of generic drugs. The pharmacist should also be aware of current drugs on the market, the patient medication record to avoid drug interactions and provide information to the patient on OTC and prescription drugs.

The pharmacist also tells me how the new drug relates to my total drug plan. The doctor tends to concentrate on one drug and forgets the rest. The pharmacist is more detailed about all the information which he provides to me. The doctor mentions one or two side effects and I usually end up developing the third side effect which he did not mention. The pharmacist is a vital part of health care. A pharmacist in Arizona told my mom not to mix two drugs and he saved her life. I have not ever visited with a pharmacist to learn about their education duration. I know it is very detailed. Doctors receive a lot of samples but do not keep up on the new information about these drugs. They usually give them to the patient to see how they work. I would like to learn about my drugs from the pharmacist since he is so up to date and specifically detailed. On the rehab ward though, the pharmacist is never around so I have to settle for the nurse or doctor.

The nurses are helpful to provide me with verbal information about my medications. The nurse is very accessible and provides the drug to the patient. In the old days, the nurse would bring the drug and the patient took it with no questions asked. Today the patient has the right to refuse medications. I think that the changes in health care have been more positive to involve the patient. The doctor tends to bring in the literature from the prescription bottle. That does me a lot of good since I cannot understand the language anyway. I need the pharmacist! By the way, a druggist is the same as a pharmacist.

After a clinic visit, I am not afraid to call the doctor to ask a question on a new medication. It would not be fair to call the pharmacist since he is updated by me on any new diagnoses and tests.

Valium is a drug which I use to prevent muscle spasms. I have taken 10 mg three times daily for the past 19 years. It works by putting the spasm to sleep. It is a narcotic and I think I am hooked on it. My muscle spasms are controlled on a 10 mg dose but not on a 5 mg dose. I think it is important to read about

Margaret Pierce (continued)

medications. I know that Valium has caused cancer in clinical rats. The information has not yet been linked with human use.

On this list, aspirin is used to relieve pain. Milk of magnesia is a laxative. Alka-Seltzer is used to treat an acid stomach or colds. My proctologist told me that a person can get hooked on milk of magnesia and that natural sprinkles like Maltsupex is a better laxative. I have never heard of Zantac, Colace or Dibenzyline. If I had to take one of those drugs I would want to know why I have to take it, the action of the drug, and the side effects. I also want to know if this medication will interact with any other medication I take. 'Dibenzyline' is a mean-looking word. I would want to know more information about the name including the pronunciation. Also, will the medication change my personality and make me moody? Is it habit forming? Saying the name of a medication correctly is important. Lomotil was listed as the number one suicide drug in a recent lady's magazine. This drug has many different pronunciations too. I have to make sure that I am never given this drug because it messes up my bowel program after two capsules!

APPENDIX 7

Since brand name medications and products are not noted by a trademark symbol (R) in the text, the following table provides a listing of all brand name medications and products mentioned by the patients during the interviews.

Brand Name Medications and Products

Actifed	Kaopectate	Renacidin
Advil	Kraft	Robitussin
Alka-Seltzer	Lanoxin	Rolaids
Anacin	Kioresal	Sine-Off
Bayer Aspirin	Lomotil	Sucrets
Benadryl	Macrodantin	Surfak
Coke	Maltsupex	Tab
Colace	Mandelamine	Tagamet
Contac	Mentholatum	Triaminic
Coricidin	Metamucil	Tums
Coumadin	Motrin	Tylenol
Darvon	Nuprin	Valium
Dilaudid	Nyquil	Vaseline
Dristan	Panadol	Vicks
Ensure	Pepsi	Vicks Formula 44-D
Inderal LA	Pepto Bismol	Visine
Indocin	Percocet	Zantac
Isordil	Persantine	

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